June-July, 1977

The National Future Farmer

Owned and Published by the Future Farmers of America

A Word With The Editor

FFA has completed another banner year in terms of membership. While the official figure has not been released, at press time the membership count was just over 508,000, the largest ever in the history of the organization. This compares with a membership last year of 500,385 members.

FFA has other biggies. The 50th Anniversary National Convention this fall is expected to have more in attendance than ever before. Contributions to the National FFA Foundation are the highest ever. There are more FFA proficiency awards offered to FFA members than ever before, more FFA contests for member participation, more FFA jackets sold each year by the Supply Service, more dollars spent for advertising in your national magazine, circulation the most ever, and on it goes.

As typical Americans, we are impressed with bigness. Too often we think bigger means better.

You and the FFA can be proud of these and other records. You helped set them as well as those in your own chapter and state association.

But there is a problem FFA has not yet solved. One criticism of FFA today is that all vo-ag students are not officially members, i.e., they are not counted in the above membership figures. Apparently in some schools a few students do participate in those FFA activities which are integral at the local level but they do not officially join the FFA and receive all of its benefits. The critics say that if FFA is to continue as an integral part of vocational agriculture, which indeed it is, then all vo-ag students must be counted as members of FFA. The fact that there is an FFA chapter operating in the ag department is not enough, according to these critics, unless all students are FFA members.

This places a challenge before all who work for FFA but especially the advisors, officers and members at the local level. In a few instances, perhaps even a school if they have vo-ag but no chartered FFA chapter. This problem can be solved and now is the time to plan how you will handle it in your school this fall.

Wilson Carnes

In This Issue

FFA—The Early Years 11
Medallion Winners 13
Ag Sales 16
BOAC Builds Better Berrien 22
Duncan's Farmer Physician 24
A Fishy Business 26
Trail Ride! 28
Smokejumpers 30
Leaders . . . Not Followers 34
Dependable Spinnerbait 43
Jason Read the Fine Print 46
Farm Energy 48
Teaching Ag 50
Careers 61

In Every Issue

Looking Ahead 8
From the Mailbag 10
News in Brief 12
Chapter Scoop 40
FFA in Action 52
The Joke Page 62

The Cover

Green plants and sunshine come with the season's change. Joe Armstrong, president of the Stuttgart FFA Chapter in Arkansas, assists a fellow member in the cleaning of some plants before the spring buying rush. The story of Stuttgart's diversified department is on Page 34.

Cover photo by K. Elliott Nowels

CHANGE OF ADDRESS: Send both old and new addresses to Circulation Department, *The National FUTURE FARMER*, P.O. Box 15130, Alexandria, Virginia 22309.

CORRESPONDENCE: Address all correspondence to: *The National FUTURE FARMER*, P.O. Box 15130, Alexandria, Virginia 22309. Offices are located at the National FFA Center at 5630 Mount Vernon Highway, Alexandria, Virginia 22309.

The National FUTURE FARMER is published bimonthly by the Future Farmers of America at 5630 Mount Vernon Highway, Alexandria, Virginia 22309. Second class postage paid at Alexandria, Virginia, and at additional mailing offices. Copyright 1977 by the Future Farmers of America.

Single subscription, $1.00 per year in U.S. and possessions. FFA members 75¢ paid with dues. Single copy 50¢; two-four copies 30¢ each, five or more 25¢ each. Foreign subscriptions, $1.00 plus 50¢ extra for postage.

The National
Future Farmer

Owned and Published by the Future Farmers of America

Volume 25 **Number 5**

June-July, 1977

MAGAZINE STAFF

Editor, Wilson W. Carnes; *Associate Editors*, John M. Pitzer, K. Elliott Nowels; *Field Editor*, Gary Bye; *Editorial Assistants*, Jo Colley, Mildred Bryan; *Advertising Manager*, Glenn D. Luedke; *Regional Advertising Manager*, Richard C. Waitley; *Advertising Assistant*, Laurie Welch; *Promotion Assistant*, Craig Osborne; *Circulation Fulfillment Manager*, Adriana L. Stagg; *Assistants*, Carolyn Roy, Diana Devine, Helen Jonah, Angie Loomis, Ernestine Triner.

NATIONAL OFFICERS

National President, James Bode, 114 North Galena, Geary, Oklahoma 73040; *National Secretary*, Bruce Maloch, Route 1, Box 140, Emerson, Arkansas 71740; *National Vice Presidents*, Sam Brownback, RR 1, Parker, Kansas 66072; Rick McDaniel, RR 1, 2500 CH59, Nevada, Ohio 44849; Danny Schiffer, Route 8, Box 692, Orlando, Florida 32807; Julie Smiley, 1765 Smiley Drive, Mount Vernon, Washington 98273.

BOARD OF DIRECTORS

Chairman of the Board of Directors, National Advisor H. N. Hunsicker; *Members of the Board*, John W. Bunten, Robert Crawley, Paul M. Day, H. E. Edwards, John W. Lacey, Martin L. Mitchell, Art Nelson, J. W. Warren.

NATIONAL STAFF

National Treasurer, J. M. Campbell; *Administrative Director*, Edward J. Hawkins; *Associate Executive Secretary*, Coleman Harris; *Manager of International Programs*, Lennie Camage; *FFA Program Specialist (Awards)*, Robert Seefeldt; *FFA Program Specialists (Contests)*, Ted Amick; *Director of Information*, Daniel Reuwee; *Manager of FFA Supply Service*, Harry J. Andrews; *Chief Accountant*, George Verzagt; *Administrative Secretary FFA Alumni Association*, Robert W. Cox.

ADVERTISING OFFICES

The National FUTURE FARMER
P. O. Box 15130
Alexandria, Virginia 22309 — 703-360-3600

Robert C. Whaley
6430 Sunset Boulevard, Suite 910
Los Angeles, California 90028 — 213-463-7157

Robert Flahive Company
615 Montgomery Street
San Francisco, California 94111 — 415-781-4583

The National FUTURE FARMER, member of Audit Bureau of Circulations.

TO CHANGE YOUR ADDRESS OR ORDER A SUBSCRIPTION

Please use this form.

TO SUBSCRIBE: check the term below and fill in your name and address.

- ☐ 3 years $3
- ☐ 2 years $2
- ☐ 1 year $1

Foreign subscriptions, add 50¢ a year extra for postage.

ATTACH CHECK AND MAIL TO:
The National FUTURE FARMER
P.O. Box 15130
Alexandria, Virginia 22309

Name (please print)
Address (new, if for change of address)
City State Zip

ATTACH LABEL HERE for address change or other inquiry.

If moving, list new address above.

EVENING WATCH, CAPE OF GOOD HOPE.

The first man to round it was Portuguese—Bartholomeu Dias in 1488, probing past Africa for a sea route to the Indies. He weathered its storms, then landed to give it its name. Cabo da Boa Esperança—Cape of Good Hope.

Today's sailor may round the Cape in a guided missile cruiser or a nuclear submarine. But the feel of history is still there. It makes his job more than a job. It makes it an adventure.

If you're a young man who's through high school—or will be soon—check into the Navy. If you qualify, we can send you to school in any of over 60 career fields. You'll travel, make new friends, get thirty days' vacation with pay.

Navy recruiters have all the details. Talk to one or call us at 800-841-8000 toll free. (In Georgia, 800-342-5855.) Adventure is still around. You just have to know where to look for it.

Capt. H. C. Atwood, Jr., U. S. Navy 8200
NAVY OPPORTUNITY INFORMATION CENTER
P.O. Box 2000, Pelham Manor, N.Y. 10803

☐ Send me more information on Navy opportunities. (G)
☐ Call me (G)

NAME _____
First (Please Print) Last

ADDRESS _____

CITY _____ STATE _____ ZIP _____

BIRTH DATE _____ _____
Last Grade Completed

PHONE _____
(Area Code)

NF 6-7/7

NAVY. IT'S NOT JUST A JOB, IT'S AN ADVENTURE.

Easy supply ordering...

that's the spirit!

Nasco's '76-'77 Farm & Ranch Catalog makes your supply and equipment ordering easy! All your day-to-day needs in one convenient source. Animal health products. Breed promotion items. Showing and grooming supplies. Trophies. Livestock identification. And A.I. needs. Send for your FREE catalog today. That's the spirit!
Write Dept. AL-76

Nasco

Fort Atkinson, WI 53538 or Modesto, CA 95352

One of A Kind

There is only one official supplier of FFA merchandise. It is National FFA Supply Service, Alexandria, Virginia.

- **Owned by FFA**
- **Operated by FFA**
- **For FFA**

That's right. Totally owned by FFA members and operated for them. Controlled by the National FFA Board of Directors and National FFA Officers.

All income above the cost of operation is used by the organization for the benefit of FFA members—not as profit to any individual.

Don't be mislead by companies trying to commercialize on the name and emblem of FFA. If it is not from the National FFA Supply Service located at Alexandria, Virginia, it is not official.

Your advisor is mailed a catalog each summer. See him to order your FFA items.

Support FFA! Order from the:
National FFA Supply Service
P. O Box 15159
Alexandria, Virginia 22309

Looking Ahead

Agriculture

PASS THE POPCORN, we've got a record crop. Last year, U.S. producers harvested popcorn on 6 percent fewer acres than in 1975, but came up with a record crop anyway. A recent USDA report pegged the final tally for the 1976 popcorn harvest at 602 million pounds of shelled corn—11 percent more than a year earlier and 57 percent over 1974. Exceptionally high yields averaging 2,863 pounds an acre—up 443 pounds from 1975—caused the increase. Top producer in 1976 was Nebraska with 166 million pounds. Indiana grabbed second highest with 127 million pounds.

THE WORLD'S LARGEST SOLAR-powered irrigation system was recently dedicated in Arizona. The system was developed by laboratories of the Batelle Memorial Institute, a research organization, and features 5,500 square feet of solar collectors that track the sun across the sky. A 50-horse-power pump capable of delivering up to 10,000 gallons of irrigation water per minute is an integral part of the functional and innovative attempt at decreasing energy costs involved in large volume irrigation.

IN STARK CONTRAST TO our nation's dwindling sheep population the Texas inventory of goats and kids registered a 16 percent increase during 1976. The USDA Crop Reporting Board estimates total goats and kids on hand as of the first of the year at 1.3 million. The inventory value rallied for a 46 percent increase to $32.5 million, as average value per head jumped $5.10 from a year ago up to $25.

A SPECIAL FUNGUS is being used by University of Missouri-Columbia researchers to "regenerate" young oak seedlings which have a tendency toward a dormant-like state for two to three years after planting. A mutually beneficial relationship is formed by inoculating the soil surrounding the roots with the fungus, a mycorrhizal type.

CRIME IS COMING to the country according to a study by USDA's Economic Research Service. It shows that while the chance of a rural dweller becoming a victim of crime remains well below that of his urban cousin, rural policemen face an increased workload because of growing populations, improved transportation that gives thieves ready access to remote areas, rising rural wealth that attracts criminals and growing expectations of police performance by rural residents.

CANDY COUNTER BARGAINS will be few and far between this year, warns the Foreign Agricultural Service. World cocoa prices have climbed to record levels, with spot market prices for cocoa beans averaging over $1.55 a pound last December—more than double the figure at the start of 1976. Poor crop prospects in West Africa are among the situations blamed. Nearly two-thirds of the world's cocoa typically comes from West Africa.

THE NATIONAL BEEF REFERENDUM registering and voting dates are set at the first parts of June and July. If you own cattle you can register to vote at the local Agricultural Stabilization and Conservation Service (ASCS) office during business hours from June 6-17. The actual voting will be at the same location from July 5-15. The vote by the nation's cattlemen concerns establishing a national uniform collection plan to fund beef research, promotion and consumer information programs. (See The Beef Referendum, April-May issue, p. 40, *The National FUTURE FARMER.*)

For a Spirit you can both feel ...in weeks.

You can't explain it to others—that little extra something. But when it's there, you're satisfied.

It's the feeling and spirit that comes with caring . . . *and* the solid, basic nutrition your horse is guaranteed with SHELL HORSE CONDITIONER.

HORSE CONDITIONER is the smart, economical way to make certain your horse is receiving 14 vitamins and 12 minerals daily. A keg lasts your horse two full months . . . at less cost per day than most other conditioners.

And by the end of that first keg, you'll both feel the difference SHELL HORSE CONDITIONER makes or your money back.

SHELL CHEMICAL CO.
Animal Health
2401 Crow Canyon Road
San Ramon, CA 94583

Shell **horse conditioner**

Share the Spirit

From the Mailbag

Readers Report

Washington, D. C.

I want to take this opportunity to compliment your Associate Editor Kim Nowels in regard to an article "Can You Hang Onto Your Family Farm?" he wrote based on an interview with me. I found his attitude to be altogether interested and interesting, and I certainly appreciate his efforts to represent my views correctly. I hope your readers enjoyed reading the article as much as I did.

Charles A. Sisson
National Economic
Analysis Division, USDA

Columbia, Missouri

The FFA Alumni could list a hundred reasons that 1976 was a successful year. One of those reasons would have to be the outstanding articles on the FFA Alumni in *The National FUTURE FARMER*. The two feature articles and coverage of FFA Alumni events in the "FFA in Action" section have received many favorable comments from both FFA Alumni and FFA members.

With our 1977 theme, "FFA Alumni . . . Supporting Vocational Agriculture," the emphasis will be on both membership growth and the development of strong programs for support and service. We hope that the FFA Alumni will merit increasing coverage in the magazine.

David C. Thomas
National FFA Alumni
Council Chairman

You can't trust a machine to make a great knife.

People make great knives. Machines can't. Each Schrade Old Timer is made with over 100 hand operations. And each hand operation is carefuly inspected. For a great knife you can trust, Schrade Cutlery Corp., New York 12428.

SCHRADE CUTLERY CORPORATION MADE IN USA

Old Timer® by Schrade

Washington, D. C.

Thank you for sending us a copy of the February-March issue of *The National FUTURE FARMER*. We have all enjoyed this fine article about an FFA member who made good.

Joseph L. "Jody" Powell, Jr.
Press Secretary
The White House

Polo, Missouri

We have two boys in the Polo FFA. They are learning so many good, basic skills in their ag classes under the guidance of a fine teacher Mr. Rex Moore.

I would like to express my thanks for the FFA organization and for the opportunity these farm boys have for this training.

Many things they learn will help them in other areas of life, whether they choose farming as a profession or not.

FFA Mother

St. Hyacinthe
Quebec, Canada

I enjoy every issue of the magazine. I am convinced it really helps young farmers gain a renewed enthusiasm for their future profession. Farmers are in more than one way real professionals. I congratulate the staff of *The National FUTURE FARMER* for telling the story of those who still have the enthusiasm to start farming.

In the Province of Quebec we have chosen the theme: "Farming and Youth, Partners in Progress." This theme is being published all over to show people and especially the farmers of tomorrow how much we count on them.

Louis Bernard

Archie, Missouri

I am a young man 18 years old who graduates from high school in May, 1977. I have been raised on a farm and worked driving tractors to sow wheat and oats and plant milo, corn and beans.

I have ground and mixed feeds, fed, watered, hayed, cleaned and sterilized barns. I have helped sows farrow, persuaded baby pigs to drink their first milk from the sow, have sorted, graded and hauled fat-hogs to market. I have milked cows, helped them calve and bucket fed baby calves to weaning age.

Most farm raised boys with this amount of knowledge and skill do know how to farm and would like to keep on farming. But the going wage for the foregoing services

(Continued on Page 13)

FFA at 50

The Early Years

The first in a series of articles about the history of FFA

By Wilson Carnes, Editor

THE story of the Future Farmers of America must go back farther than 1928, the year FFA was organized. It starts with vocational education because FFA is tied hand in hand with vocational education.

Vocational education is probably one of the earliest forms of education, dating to the early periods of history when young men served as apprentices to masters as a means of learning a trade. Apprentices learned by doing.

The writings of early American leaders show that many of them were concerned with the need for some system to provide education and training in agriculture. George Washington, one of the best technically educated Americans of his day, had gained most of his knowledge about farming by experimentation and through correspondence with a small group of agriculturists in England. Washington frequently urged the establishment of a "Board of Agriculture" in America.

Concerned with the problem as they were, the leaders were not able to come up with a satisfactory answer. Agricultural societies, the forerunners of our present farm organizations, were organized for the promotion of agriculture, beginning about 1785. The societies led to the establishment of educational fairs and exhibitions, another means of spreading information about agriculture. The first such fairs in America were held during the early 1800's.

Even in those days, some of the societies sought to have agriculture taught in the public schools, but with little success.

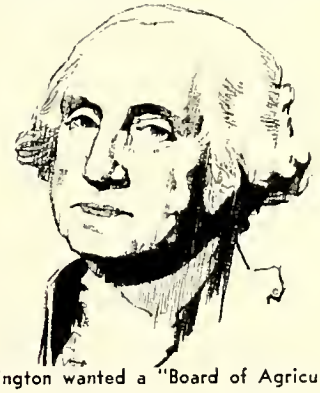
Nearly three quarters of a century after George Washington first proposed the idea, an act of Congress in 1862 established the Department of Agriculture. Its chief officer was called Commissioner of Agriculture, and it was not until 1889 that the department became an independent branch of the government and its head, or secretary, a member of the President's Cabinet.

It was in 1862, also, that President Lincoln signed the Morrill Act, leading toward the establishment of the great land-grant colleges that offered, among other courses, study in the field of agriculture.

And so, in the last part of the nineteenth century, there were men trained in the sciences of agriculture; not many, it is true, but enough to grasp the vision of great things in store for the nation when their knowledge could be shared by all farmers.

Once again the move came to introduce the study of agriculture in the public schools. Many states required that boys take a course in agriculture in school (usually in the seventh or eighth grade). Colleges established short courses and farmers' institutes in an attempt to carry their work directly to the farmer.

Perhaps the closest approach of any of these to the vocational agriculture training we know today was the handful of special agricultural schools where students received classroom instruction plus the benefit of experience of working on the school farms.



Washington wanted a "Board of Agriculture."

In 1880, Booker T. Washington established agricultural teaching for black students in his little one-room school of Tuskegee, Alabama. Friends bought a 100-acre farm for the school to give the students a chance to pay part of their expenses and at the same time to obtain intelligent training in the best methods of farming.

A state bill passed in 1889 established Congressional District Agricultural Schools in Alabama. A similar movement was going on throughout the country. At the turn of the century, farm boys in many areas were able to get training in agriculture from schools of less than college grade.

The period was one of discouragement to farm youth. They were migrating from farm to city in droves. Public leaders became concerned as to the effect of the trend on rural life.

Several states took legislative action to add departments of vocational agriculture to the high school curriculum in the early 1900's. Some of these courses were pretty much "academic," or "book" agriculture. Others went overboard in the other direction, basing the instruction almost entirely on practice work of actual farming, usually on farms maintained by the schools.

There was disagreement among educators. Some advocated special agriculture schools for farm boys. Others wanted to teach agriculture as a part of the regular high school curriculum. Gradually a system evolved combining classroom instruction with the practical work of the farming projects carried by the student on the home or school farm. Instruction in farm shop practices was added. The program became one of "learning to do—doing to learn." When students operated their farming projects at home where they could keep the profits of their work a third aspect, "earning to live," was added.

Records are vague concerning organizations of agriculture students in those early schools, but there is evidence of some local organizations, and definite proof that "Learn By Doing" was the motto of the Agricolae Club of Ypsilanti, Michigan, an organization of high school agricultural students which was founded in 1915 by their teacher, B. A. Walpole.

Walpole's idea spread to other Michigan schools and by 1917 there was a state association of clubs known as The Michigan High School Agricultural Association. Their motto was similar to Agricolae: "I Learn To Do By Doing." When the Michigan group voted to become affiliated with the Future Farmers of America in May, 1929, it had over 100 local chapters.

Illinois is reported to have had agricultural clubs organized in some of their high schools as early as 1912.

Congress, in its continuing effort to help farmers improve their methods,

(Continued on Page 14)

This article was condensed from "FFA at 25" by the late John Farrar, for years director of information for the FFA. The book is no longer in print.

Needle sharp, crystal clear sighting. Accurate adjustments. Effective fog proofing. Rugged reliability! The Leupold "Golden Ring®" performance starts on the inside and climaxes with total satisfaction—for even the most demanding shooter. Prove it at your dealer's. *For catalog, Leupold & Stevens, Inc., Dept. FF-1, P.O. Box 688, Beaverton, OR 97005.*

Leupold sights
Partners in Performance
WITH NOSLER BULLETS

News in Brief

The FFA

FOUR NATIONAL OFFICERS left for Europe in late May with their destination being the Soviet Union. Sam Brownback, Bruce Maloch, Rick McDaniel and Julie Smiley accepted an invitation extended by the USSR's Committee of Youth Organizations (CYO). En route to Russia, the National Officers visited the National Farmers Union and the National Federation of Farmers Club in England, and the headquarters of the Swedish Young Farmer Organization in Stockholm. The group will be in Russia for ten days of the two-week trip. A return program for a delegation from the CYO's rural division is being planned for a later date.

NURSERY OPERATIONS PROFICIENCY will be recognized by a new award to be presented for the first time during the 1977-78 school year. The proficiency award will recognize students involved in production of shrubs and trees and other plant materials for the purpose of transplanting or propagation. It's sponsored by the Weyerhaeuser Corporation, which also sponsors the FFA Forestry Management Award.

ANOTHER NEW AWARD will be presented for turf and landscape management. Students involved in landscape design or turf management will be eligible for this one. Applications for this award will be in the 1977-78 Chapter Guide. It will be presented for the first time in 1977-78 and it's sponsored by O. M. Scott and Sons of Marysville, Ohio.

FIFTY-FIVE U. S. STUDENTS will be heading for 16 different countries in Europe, South America and the South Pacific in June and September to stay from three months up to a year as a part of the FFA's Work Experience Abroad program. Inbound from the same areas are 40 foreign students to arrive in late June. Host families are needed for these people and if your family is in agriculture in some capacity and are interested in sharing your lifestyle with a foreign student, contact the International Program staff at the National FFA Center, 703-360-3600.

CONVENTION REGISTRATION materials are being mailed from the national organization to the states this spring. Chapters should receive them before school is let out for the summer. Be sure and mark November 8-11 down on the calendar—that's the date of your 1977 Fiftieth National Convention.

OVER 100 INDIVIDUALS REPRESENTING agricultural education in 20 different states were recently at the National FFA Center for dinner. They were in town for the last of three sectional conferences to review the final program draft of Program Standards of Agriculture/Agribusiness Education held in Chevy Chase, Maryland. The group of teacher educators toured the center and were able to discuss its operation with members of the national staff. Here, National Advisor, H. N. Hunsicker, addressed the group after the meal.

Mailbag

(Continued from Page 10)

is a mere $2.30 per hour—if you can find a farmer who can afford to hire you. With such small wages, how can a young farmer possibly get a foothold on farming as a way of life?

The plight of the young farmer is that unless his father can finance the son there is no way his skills can be retained on the farm. He must look elsewhere for a way to earn a living. Why should all this knowledge and skill be lost to the agricultural industry?

Randy Downey

Winners of FFA 50th Anniversary Medallion Contest

The National FFA Organization has announced the winners of the FFA 50th Anniversary Medallion contest.

Originally the contest was announced in December of 1975 and offered prizes to FFA members who would like to try their hand at designing the reverse side of the FFA's commemorative medallion to be produced and sold during the FFA's Golden Anniversary.

Nearly 500 FFA members submitted entries by the June 15, 1976, deadline. The entries varied from very detailed and beautiful drawings by students with much talent to simple sketches which showed much depth.

First prize is an expense-paid trip to the 1977 National FFA Convention in Kansas City where the 50th Anniversary celebration for FFA will begin. The winning FFA members and advisor will be introduced from the stage at which time the medallion will be unveiled.

Second prize is $100 cash. Third is a $50 FFA gift certificate. Fourth is a $25 FFA gift certificate. Fifth through tenth places receive bronze versions of the medallion.

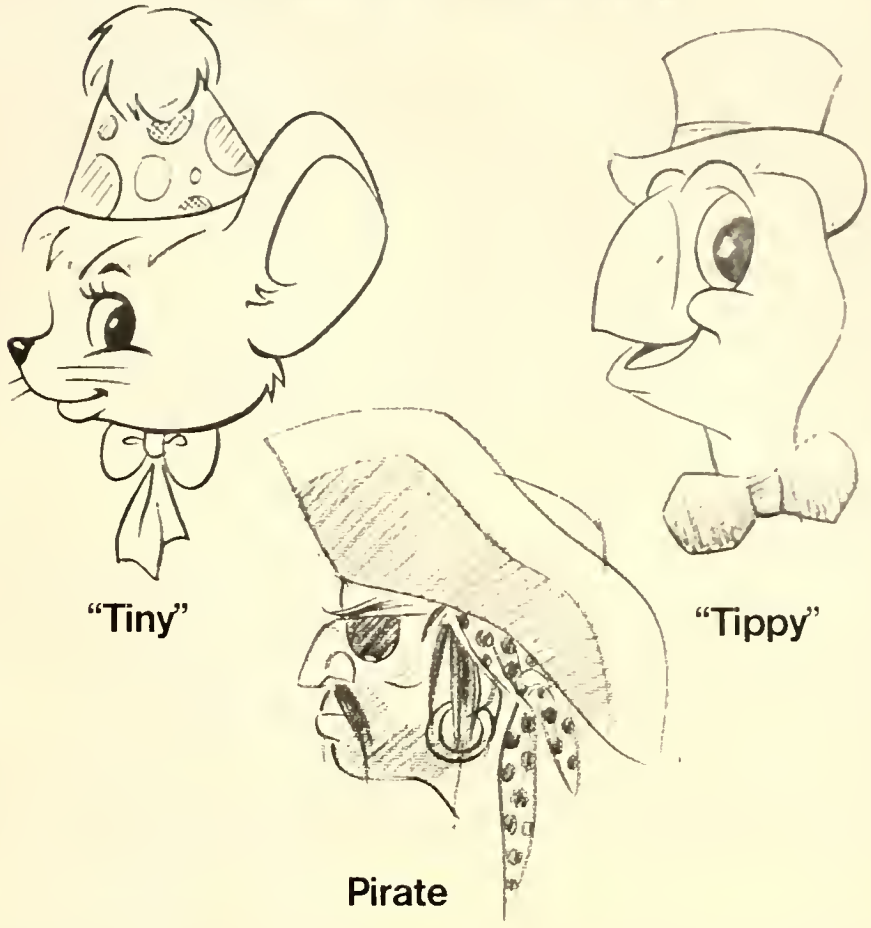
FFA plans to sell the anniversary medallion in bronze, silver and even limited editions for those who wish them in gold. It will go on sale at the 1977 National Convention.

Here are the winners: First Place: Patti 'Yanz, Colville, Washington. Second Place: Les Hershey, Kirkwood, Pennsylvania, Solanco Chapter. Third Place: Laurie Rohlk, Ida Grove, Iowa. Fourth Place: Cathy Ahler, Burlington, Wisconsin.

Fifth Place: Brent Marsh, Marshall, Missouri. Sixth Place: Mary Beth Richardson, Madera, California. Seventh Place: Ron Love, Wilkinson, Indiana, Eastern Hancock Chapter. Eighth Place: Steve Rinehart, Bunkerhill, West Virginia, Musselman Chapter. Ninth Place: Kyle Spencer, Noblesville, Indiana, and Tenth Place: Larry Buhrandt, Suring, Wisconsin.

Over $5,000 in prizes

Awarded Monthly



Draw Your Favorite!

You may win one of five $995.00 Art Scholarships or any one of seventy-five $10.00 cash prizes.

Draw your favorite any size except like a tracing. Use pencil. Every qualified entrant receives a free professional estimate of his drawing.

Scholarship winners will receive Fundamentals of Art taught by Art Instruction Schools, one of America's leading home study art schools. Our objective is to find prospective students who appear to be properly motivated and have an appreciation and liking for art.

Your entry will be judged in the month received. Prizes awarded for best drawings of various subjects received from qualified entrants age 14 and over. One $25 cash award for the best drawing from entrants age 12 and 13. No drawings can be returned. Our students and professional artists not eligible. Contest winners will be notified. Send your entry today.

MAIL THIS COUPON TO ENTER CONTEST

ART INSTRUCTION SCHOOLS
Studio 7U-3540
500 South Fourth Street
Minneapolis, Minnesota 55415

Please enter my drawing in your monthly contest. (PLEASE PRINT)

Name_____

Occupation_____ Age_____

Address_____ Apt._____

City_____ State_____

County_____ Zip_____

Telephone Number_____

FFA at 50

(Continued from Page 11)

passed the Smith-Lever Act in 1914, establishing the Agricultural Extension Service. The program helped to move agricultural knowledge from the colleges and experiment stations to the community. Still lacking, though, was a program of systematic courses of instruction in agriculture for the great masses of farmers and their sons.

That program came in 1917 with passage of a congressional act sponsored by Senator Hoke Smith and Representative Dudley Hughes, both of Georgia. The act provided federal funds to the states, on a fifty-fifty matching basis, for the promotion of a program of vocational education in the high schools. The act specified that students of vocational agriculture, in addition to their studies in school, must have in operation a program of supervised practice for at least six months of the year.

The plan of the Smith-Hughes Act might be simply stated like this: The federal government said to the states: "You develop a program for vocational education in your high schools and we'll pay half of its cost, provided you first submit plans for your program that meet our approval." The state boards then repeated the offer to the local communities.

States were quick to adopt the provisions of the Smith-Hughes Act and a program of systematic instruction in vocational agriculture spread throughout the nation in just a few years. Where only 14 states had any semblance of a vocational agriculture program in 1917, five years later there were more than 2,500 schools in 48 states offering such courses. The impact of the federal act was such that the students of vocational agriculture became known as "Smith-Hughes boys."

Almost as rapidly as the courses in vocational agriculture were established, there sprang up local organizations of students. When the first farm boy organization of Smith-Hughes vocational agriculture students was formed will never be known. Undoubtedly, there were many from the very beginning. The Michigan clubs, for instance, already organized, just continued in their original form while the high school teaching in agriculture changed to conform with the provisions of the Smith-Hughes Act.

Many states report early clubs of vocational agriculture students, going under a wide variety of names. Maryland had at least one in 1919 at Middleton. A Maine group know as Young Farmers Association of Presque Isle, was organized in 1918 for cooperative activities.

New York had the Endicott Young Farmers Club, organized by Stephen O. Salmon in 1920. In Georgia, departments of vocational agriculture were holding father-son banquets in 1920. Earliest known activity of that kind was at the Winterville High School.

There were statewide activities of vocational agriculture students before there were formally-adopted state associations. Livestock judging contests were among the most prominent forms of inter-club activity. There are records of statewide judging contests for vocational agriculture students in Alabama and Virginia in 1919, and in North Carolina, Nebraska and New Mexico in 1920.

Other records show organizations of agriculture service clubs in many Iowa high schools, with students using a regular ritual for their meetings, participating in judging contests and embarking on community service activities. "Living to Serve" was finding its place in vocational agriculture.

As early as 1919 Henry Groseclose, later to become one of the great FFA organizers, used his agriculture students at Buckingham High School, Virginia, to make a survey of agricultural practices and production on 100 neighboring farms.

Was Squanto the first ag teacher? He taught the Pilgrims how to plant corn.

Students at the Rich Square School in North Carolina organized in 1920 to remodel an old barn to make a farm shop for the school, an activity that became common in later years as students donated their labor to help build school facilities.

Other activities that later were to become typical of the FFA are indicated in a 1920-21 summary from Georgia: "The work in Georgia has been significant in the following lines: The teachers have organized a large number of community fairs; one school has developed a cooperative marketing association, another has placed 55 pigs for a local bank on an endless chain plan."

Vocational education days (project tours,) father and son banquets, and contests were activities for popularizing the program that were recommended at a 1921 Southern Region conference for workers in agricultural education. A regional judging contest held in November, 1921, had participation of students from seven states.

There is little record of the real purposes for which the early local clubs were organized. Teachers apparently used them primarily for stimulating the students' interest in agriculture and to promote the vocational agriculture program. Social and recreational activities were common, and the added values of leadership training "for future participation in farmers' organizations." Cooperative effort was promoted through the clubs.

The Junior Farmers Association founded in 1922 by the Beatrice, Nebraska, vocational agriculture teacher, L. D. Clements, had a list of eight purposes similar to those later adopted by FFA.

A report from Delaware made in 1926 by R. W. Heim told of promoting the organization of vocational agriculture clubs "to foster increased interest in farming and in related social activities."

Formation of state associations of vocational agricultural students followed the local organizations. Michigan and Illinois, with their state organizations in effect even before 1917, continued along the lines they had followed. Many years before FFA came into existence, Illinois was honoring outstanding students of agriculture in state meetings by designating them as Master Farmers.

New Jersey, under the leadership of State Supervisor H. O. Sampson, established The Young Farmers Organization of New Jersey in 1923. A publication issued by the New Jersey organization in 1924 was called *The Future Farmer*. L. S. Archibald, a teacher member of the organization's advisory committee, wrote in the first issue of *The Future Farmer*: "I have no doubt that other states will be copying and looking to New Jersey for a model from which their state organizations will be formed. Who can tell but that a nationwide organization may eventually be formed and that the president of it may be a New Jersey boy?"

Archibald's word were prophetic, for the first national president of the FFA, formed just four years later, was a New Jersey boy.

Ohio farm boys were affiliated with a state organization known as the Townsend Agricultural Education Society.

State by state, local organizations of farm boys who were studying vocational agriculture under the provisions of the Smith-Hughes Act were affiliating themselves into formal associations.

Next Issue: Judging Contests

ALBERS®

Calf Manna®

IT'S AN EMPTY "SHOW STALL" WITHOUT IT!

Walk the stalls at any livestock show and chances are you'll find Calf Manna!

You'll also find animals with championship potential. Animals that exhibit true genetic ability and the tender-loving-care of a concerned owner. But breeding and management are only part of the story. It takes more to build a champion. And that's why Calf Manna is there!

Size, heart girth, sound bone, good muscling, glossy haircoat, and top condition are the realization of an efficient feeding program involving Calf Manna, fed at the rate of just one pound per day.

Calf Manna is a highly fortified concentrate that belongs in the feeding program of any beef animal destined for show or sale. For specific feeding directions, formulas and confirmed statements of top cattlemen as to Calf Manna's results, write for your free copy of "Selecting, Fitting and Showing Livestock."

Begin feeding Calf Manna now, and join the majority of major show winners who know what it takes to build a champion!

Carnation-Albers / THE CALF MANNA PEOPLE

6400 Glenwood P.O. Box 2917 Shawnee Mission, Kansas 66201

Ag Sales

The Future Looks Great

By K. Elliott Nowels

STEVE Kendrick is usually out of the house by six a.m. to begin a busy day. He might start off by helping a nearby dairyman milk a few cows, then go on down the road to formulate a proper nutritious ration for a large beef operation. A next stop might be a co-operative grain elevator to discuss the pros and cons of a new feed on the market.

Kendrick is a salesman. Or, more properly, district sales representative for the Feed Division of Central Soya Company, Inc., one of the world's largest feed companies. Central Soya's feed division includes Master Mix Livestock and Poultry Feeds and Farmacy Animal Health Products.

Kendrick, who graduated from college in 1975 with a bachelor's degree in animal science, serves a seven-county district in eastern Michigan. He represents his company and his product to farmers and retail dealers—a very important function in the wide world of agribusiness. A partial list of his responsibilities may look something like this.

- Maintain or increase amount of feed sold in the area.
- Expose new dealers to the products, also research prospective new dealers for these products.
- Provide training to farmers and dealers about his company's products.
- Formulate good nutritious feed rations geared to individual farmers' needs.

"Ninety percent of the feed we sell in this seven-county area probably goes to dairy operations, but we do have around 45,000 head of beef in the same area," Kendrick said, explaining that he actually serves as a kind of nutritionist for many of these farms.

Steve indicated that his education in animal science was well suited to his needs as an ag salesman, but if there was a regret about college, it was that he didn't take as many business and accounting courses as he had now found would be beneficial.

Kendrick thought the job market for people interested in sales-related positions looked fairly good.

"Many companies are looking for young people they can train for a position similar to mine," he said. "They're looking for aggressive individuals." He added that the monetary reward was in the right ball park. "This (sales) is where the money is."

E. E. Derrow, assistant dean of the College of Agriculture and Home Economics at Ohio State University and in charge of job placement for students, agrees with Kendrick on several points.

"Sales has been the kind of function that dictates we need more people, comparatively speaking, out in the field, marketing or selling the product, than many of the other functions within the agribusiness world. Sales has been an important function, numberwise, for placing students in jobs upon graduation," Derrow explained. "We'll see a lot more sales opportunities come to our attention—the sheer numbers of people needed are typically greater."

Derrow said that in 1976 about 48 percent of the agriculture graduates at Ohio State went into the agribusiness sector of the job market, and greater than 40 percent of that number went into a sales-related position. He added that 1977 has been a good year thus far for career placement in agriculture.

"We are experiencing a better overall job market than we did in 1976 or 1975," he said. "In fact, it's been a good year, the past five months have been very excellent job months for our graduates."

The assistant dean thought the students were gradually becoming more informed about sales and a negative attitude that once prevailed is dissipating.

"More students each year are a little better informed about the fact, number one, that there are sales positions available, perhaps more frequently than others, they're taking a look at that, and number two, that the sales function is, in fact, different than the stereotype notion of what a salesman is going to do," he remarked. "Many of these

(Continued on Page 18)

Derrow on ag sales: "Sales has been an important function for placing students upon graduation . . . the sheer numbers of people needed are typically greater."

THE TIRE'S SHORT NAME IS THE FIRESTONE STEELTEX RADIAL

Its long name is the Through-the-fields-or-into-town, heavy-or-light-load, work-hard-and-look-good, Farmers' Pickup-Radial.

Ask a friend about the Firestone STEELTEX® RADIAL

"We're going to make a lot of people happy," says Firestone farm tire engineer Steve Petrasek standing there in the truck, "with our new steel belted radial for farm pickups. Because it's going to offer all the radial tire performance advantages that passenger car and big truck owners have had for quite awhile."

What's so good about it? For one thing, radial construction, plus a shield of steel cord from our heavy duty truck tire. There's also a polyester body for strength and an end to flat spotting, and a wide tread to float over soft stuff and put positive control under you on the highway. All of which make it a great tire for vans and light RV's, too.

Ask your Firestone Dealer or Store if your pickup wheels can handle radials. If they can, put on a set of Firestone Steeltex Radials. Then all you have to remember is that the safety of any tire depends on wear, load, inflation and driving conditions. And enjoy that new radialized rig of yours.

Specify Steeltex Radial truck tires when ordering new equipment.

Ag Sales

(Continued from Page 16)

sales-type people are, in fact, technical advisors. And if they can solve the customer's problem, where the customer is that farmer or whether it's a dealer of some type for the product, if they can give good technical advice, they build confidence in themselves and in their company."

Derrow indicated that the salary wasn't at all bad for someone like that, either. "The sales individual, the person who's been in sales for 20 years or so, has a lot going for him. That's an individual who has worked for many different customers. He may not have a fancy title like vice-president, but he's got a good salary.'

Roger Bruene is placement director for Iowa State University. He thinks sales is a very challenging area and one with great opportunity for advancement.

"I see sales as being an extremely challenging area. You have competing products and companies always trying to stay one step ahead of the competition," he said, indicating that some of the challenge might stem from being somewhat of your own boss in an area. "They'll give a district to you and say, 'we will give you a limited amount of supervision, it's up to you to get the job done'."

Bruene echoed Derrow's thought concerning the attitude of students in agriculture toward sales. "I think we're seeing a more positive image being formed."

"We are not currently meeting our needs in terms of the area of agriculture sales," he said. "It's as good an area, if not the leading area, in agriculture placement."

Is a college education necessary? Bruene said that a collge education is not a guarantee to success, but some careers do demand additional pieces of paper, meaning degrees. "It seems to me that if a person puts in additional time—whether it is in vocational technical school or a four-year institution, that person will have the potential to make better decisions more capably." He went on to say that there are sales positions in a few industries that wouldn't be filled by anyone but college graduates. "Ag chemicals is one," he stated.

"Anyone who is dealing with farmers or closely with the people that serve farmers today knows that the farmer is informed and knowledgeable, which requires the person contacting him to be the same."

Diane Gerber grew up on a hog farm, went to college and majored in agricultural economics and also loaded up on animal science courses while

" . . . the sales function is, in fact, different than the stereotype notion of what a salesman is going to do . . . "

there. She will graduate with a bachelor's degree in agriculture in early June and she's currently exploring the job market. And taking a good look at agricultural sales.

"The people that know about the job market and the people who've been exposed to sales tell me that it's worth taking a good look at," she explained.

Diane recently interviewed with Elanco Products Company for a position of field representative. To get an idea of what a person does in that position she spent an entire day with one of Elanco's district sales representatives, doing what they do in a normal day.

"He just found out the day before that I would be tagging along, so he had the day already scheduled—just what he would have done if I hadn't been there," she said. "Elanco might be more dealer-oriented than some other sales positions, but there are still many on-the-farm kinds of things." In addition to retail dealers of Elanco products, Diane said the representatives come into contact with managers of grain elevators and farmers.

"Some of my friends say, 'You've got to be kidding.' They think I'm just going to be driving up and down the road, tromping through feedlots—sure, there's a little bit of that, but there's much more to it," she said, and offered her explanation for the negative attitude of ag students toward sales. "I think we sometimes identify it (sales) with door-to-door salesmen—vacuum cleaners or encyclopedias. A lot of farm people remember too many pushy-pushy type salesmen. I was impressed with the professionalism shown by the Elanco representatives." Diane thought that the public relations aspect of a sales job was a major portion of the work, representing the product to the public and getting groups of people together for explanatory talks and questions and answers.

Is she concerned with potential problems caused by being a woman in what has commonly been considered a man's position? Not really.

"I don't think the male-female thing is a problem any more. Frankly, I feel I know about as much about pigs as most of the guys I know in the ag college, although I know I need to learn more about beef and dairy," she said. "You just have to have confidence in yourself and in your product."

Many people in ag businesses are still somewhat skeptical of a female's ability to discuss and represent an agricultural product out on the farm. But Derrow said, "The situation is changing and rapidly." He went on to indicate that general change in attitude of the business community, coupled with a lower average farmer age and yes, pressure toward equal opportunity from the federal government, has opened the field to women considerably. Consequently, numbers going into a sales-type position are increasing.

A position in sales or marketing isn't for everyone. There is no single job or profession that is. During your high school days an effort should perhaps be made to look at yourself and try to formulate some thoughts on what you might want to do. Who are you? Do you like people? What kinds of vocations do you think you could successfully pursue? When you find out the answers to some of these pointed questions, you can then narrow your attention to individual careers and ask some different questions of yourself.

- Will this job be challenging? Not simply routine?
- Are there opportunities for increased responsibility? Advancement?
- Is this position within what I want to make my chosen field?
- Does the position meet my realistic salary requirements?
- Does it give me what I would like to have in the way of travel? Either much or none?
- Do I need to obtain further education for my career plans?

The function of sales, within the greater structure of agricultural marketing, can be as diverse as the number of products originating on farms. Every commodity produced is marketed in one way or another, whether it's machinery, parts for machinery, chemicals for greater crop production and medicines to assist the livestock producer. The eyeball-to-eyeball contact that is involved in sales of those products is an integral part of the broad industry of agriculture.

In its diversity it might provide a few answers to some of your career questions.

Pay & Benefits

If you enlist in the Army, you'll start with good pay; a long list of job-training courses to choose from; 30 days paid vacation each year; the opportunities to travel and to continue your education. For more information about all the opportunities in today's Army, send the postcard. Or call 800-431-1976 toll free. In NY call 800-243-5614.

Europe.

"It's an awakening. The experience really opens your mind. Not just because you can see a lot of famous places. Here, you also get a very strong sense of what it is to be a soldier. The work is hard—long weeks in the field, in a climate a lot of us aren't used to. But when you make some friends—like I have some German and French friends—they believe in you. They give you another view of yourself and this job you're doing. I think enlisting in the Army for Europe is a good way to see Europe—and the Army."

SP4 William S. Morgan, 8th Infantry Division, Baumholder, Germany

Join the people who've joined the Army.

BOAC Builds A Better Berrien

By K. Elliott Nowels

The noose swung back and forth slowly, casting a slight shadow on the wall adjoining the cell door. It was an odd place for FFA members to be seen. But they weren't here because they had to be, they were here because they wanted to be. They were serving time—serving time helping their community remember and preserve the history of their county—Berrien County, Georgia.

Berrien FFA Chapter was the recipient of the national Building Our American Communities (BOAC) award for 1976 and the "Old Jail," as local people know it, was the rather unusual focal point for their project.

"That was one of the big parts of the Old Jail project—preserving the history of Berrien County," said Darrell Purvis, president of the FFA chapter, explaining that prior to restoration of the building, no place had been available to display pictures or items of historical value.

"We were sort of looking forward to the Bicentennial when we started the project. That's why we put everything into the last year, for the Bicentennial," Darrell explained.

"The idea took root two years earlier when representatives of the chapter sat down with the county commissioners to discuss the possibility of restoration. The 76-year-old building provided a rather formidable task.

"They (the commissioners) were kind of skeptical at first because the place was a mess. It was all grown over with vines, all the windows were broken—it was just a dilapidated old building, complete with rats and winos," the president said.

Permission was granted, however, and the area was cleaned up and the Old Jail received a new roof that first year. The following season brought the work of porch rebuilding, a process involving the members' carpentry and masonry skills.

Antique farm implements rest in the courtyard adjoining the restored jail.

"Everything else was done last year," said Darrell. "The board fence around it was built and all the inside was reworked. There was a small room in there that had been added, so we tore it down and made a big meeting room out of it. It's a public meeting room now and some of the community clubs meet there," he continued.

Many skills were learned or improved by the members during the ensuing months. The building was completely rewired electrically, the windows were replaced, the plumbing repaired and the walls stripped of old plaster, then restored. A fireplace was rebuilt and termite damage was repaired.

Filling the rooms after restoring them was a big job in itself. Committees were established and items from all over the county were collected.

Old photographs, kitchenware, books and other antiques were displayed; each of the jail's five rooms told a part of Berrien County's history.

The grounds around the building were not neglected either. After an abandoned lot adjoining the Old Jail had been donated, the project was ex-

The "Old Jail" prior to restoration— " . . . just a dilapidated old building."

Utensils fill the kitchen, the result of a cross-county antique collection drive.

Upstairs in the "old hanging jail" bars and a noose dominate the scene.

panded to establish a courtyard on that land. A six-foot high rough board fence with a total length of 772 feet was built to surround the entire lot.

"We decided to put something back there. We went out and found an old buckboard, some old wagons and a 40- or 50-year-old peanut picker," he said.

A pair of hitching rails was erected and a shed built to house the historic implements.

Financing a project such as the Old Jail can be rather burdensome and much time was spent raising the needed funds through a variety of events.

Members held an auction of donated goods, managed a concession stand at tractor pulls, harvested pecans and sold ad lines in a 24-page informative booklet that was later published about the Old Jail. These and other projects helped to foot the $12,000 bill for materials used. Total labor provided by the members on the Old Jail project is over 20,000 hours.

The FFA officers took the lead in motivating their fellow members, as well as about 2,800 other persons involved in the project in one way or another.

"I just got out there and went to work myself and when they saw that I was going to work, they put in and went at it, too. Most of these guys aren't afraid of work anyway."

Darrell said that it helped him grow personally in some ways, not the least of which was seeing a project through to completion.

"We completed a project once we had started it. Being as it was, stretched out over three years, people in the community got to thinking, 'they're not going to finish it,' but we just got down and showed them that we could do it. It took a lot of teamwork and a lot of planning but eventually it all paid off— we came through. Last November in Kansas City, that's when it really did pay off," he said.

Darrell says that accepting the award at the convention was one of the greatest moments of his life. "It was just a tremendous feeling, being up there, accepting the award on behalf of the 200 members of our chapter."

Being involved in community development is something that isn't new to Berrien FFA, nor is being recognized for it.

Berrien started its BOAC tradition in 1971 with a project labeled "Building Community Pride," with which they won the first national award ever presented.

Building Community Pride included a special day and month for beautification and coordinating the thorough efforts of all community organization and businesses in each of Berrien County's four towns.

"You can still see the results of that when you ride through town," said Advisor Melvin Johnson. "There are islands out in front of the stores that have shrubbery where there used to be just litter." Their work also included hauling away junked automobiles and cleaning vacant and run-down lots.

Next, a two-year program was started, taking a new direction in community development. In cooperation with Georgia's Department of Labor, the Berrien FFA Chapter surveyed every business in their county, compiling statistics showing the number and type of employment opportunities. The information was put into booklet form and the chapter set up a job placement center headquartered at the high school vo-ag department. Members here would match an employer with a potential part-time or full-time employee.

The next years involved initial research and planning for the old jail restoration project, up through eventual completion in the Bicentennial year of 1976.

To what can Berrien County FFA attribute its achievements in community work? Several possible reasons have been forwarded. Most vary around the themes of "cooperation," "good participation" and "hard work."

"Berrien County is interested in being improved and we have a community-minded group," said Advisor Johnson. "Our FFA chapter has always enjoyed community support."

He explained that when the BOAC program came along, it provided a necessary vehicle to gain community support.

"It proved to be a good tool to use to motivate the students into getting involved with the community's activities. It was also a method we could use to involve the overall community. Sometime or another we have probably had every organized group in Berrien County working with the BOAC project in conjunction with the FFA."

Johnson says that there are several characteristics the chapter looks for in choosing to undertake a community development. These main points are:

- A project to which every member can make a contribution.
- One that will stimulate participation and cooperation from all community groups.
- An undertaking that would involve local commercial and industrial businesses.
- A project that would involve young people and adults in a common goal.

The formula seems to work. Success in competition is not always the final word, but a record of winning three state BOAC awards and two national BOAC awards in the space of five years can speak loudly. But perhaps the greatest meaning to success is right down there in the home county, right there in Nashville and the other communities.

Advisor Johnson sums it up.

"Well, when you say 'BOAC' around Nashville, they know what you're talking about."

Leaving a career in medical research, Morton returned to his hometown to practice medicine and take up farming.

Photos by Author

A growing Angus herd is only part of the farm which began with 52 acres that once belonged to his grandfather.

Duncan's Farmer Physician

By Bob Bonebrake

THIS was one night when swapping his white smock for a pair of overalls would have to wait. Office appointments weren't completed until after 6 p.m., and Dr. Robert Morton still had his hospital rounds to make. But farm chores don't do themselves, so late that evening when the healing chores were completed the farm work began.

Morton, a practicing specialist in internal medicine from Duncan, Oklahoma, has gotten accustomed to these late night journeys to his 500-acre Indian Springs Farm just south of Duncan. Even though he admits life would be easier without dividing his time between his physician's practice and his farm he claims he can't give up either profession.

"I enjoy my farming," he said. "As a physician I realize a lot of stresses brought on by urban living are relieved when working with the soil. I have found that farmers are better able to handle the tensions of life than most city-dwellers. But don't get the idea farming is just a relaxing hobby for me. It is business—serious business."

And business is booming. It now includes an expanding Angus herd revolving around "Old 51" a bull which gained a state record setting 4.83 pounds a day during a 120-day test at the Oklahoma State University testing station. And there is also a recently acquired Yorkshire swine herd which is headed by a boar called Long Marsh Royal Crown. "RC," as the boar is called, was judged the number two boar at the 1976 National Yorkshire Type Conference in Des Moines, Iowa, and brought a whopping $16,000 at the prestigious conference sale.

His other farming ventures include an orchard containing 500 fruit trees and 400 grape and berry vines. There are also a number of acres of wheat, 25 bee hives, which Morton robs himself, and seven Quarterhorses.

"Because of the nature of the profession, medicine has to be number one in my life," Morton said. "But that doesn't take anything away from my farming. Farming and ranching is another facet of my personality which I find very gratifying. I have enjoyed it since I was a boy working on my grandfather's farm, but my interest was really sharpened when I joined the Future Farmers of America in high school."

While in FFA Morton raised a number of livestock projects, was on the livestock and meat judging teams and served the Duncan High School Chapter as vice-president.

"FFA was good training for me," he said. "It taught me basic information I needed to make farming a profitable venture. Let's face it, making a profit in agriculture today takes more training than it used to. Complicated farming methods and government regulations have made agriculture a complex business, and without training like a future farmer gets in FFA he must rely on others for the information he needs. A modern farmer has to at least know enough about the business to ask the right questions or he will never make it."

After acquiring his FFA training, Morton's desire to become a farmer had to wait while he acquired the experience and training needed to prepare him for the other interest in his life—medicine. Following high school and undergraduate college work Morton entered the University of Oklahoma's Medical school and graduated with distinction. Then he was accepted to do his internship and residency at the prestigious Massachusetts General Hospital in Boston, and later worked as a clinical assistant at the National Institute of Health in Washington, D.C.

But even while obtaining his education and medical training Morton didn't forget his farming. During their college days he and his young wife Freda kept a hive of bees on the outside landing of their tiny upstairs apartment, and he made some of the money to meet his college expenses by milking 350 cows a day at a large dairy.

"My FFA training and farm work get a lot of the credit for the successes I have had in the other areas of my life," Morton said. "In fact, without the leadership training I received in the FFA I might never have set my aim high enough to accomplish anything."

Breaking in a New Tractor

Follow correct break-in procedures to protect your investment.

FOR most farmers, the purchase of a new tractor represents one of the largest single machinery investments. You can help protect that investment if you break in the tractor in the correct way. The break-in of a tractor engine that has been rebuilt with new sleeves and piston rings also deserves special attention.

Make sure your dealer instructs you in the operation of all the controls before you operate your new tractor, recommend machinery specialists at International Harvester. This is especially important in the case of features that your former tractor did not have, such as special transmission features and hydraulic controls.

The manufacturer always supplies an operator's manual with the tractor. Study it carefully. The information it contains is based on the results of extensive laboratory and field development work by the manufacturer's engineering department.

Check the servicing recommendations for the various parts of the tractor, such as cooling system, air cleaner, oil filter, transmission lubricant level, and hydraulic fluid level. Also check for the location of the various inspection points. Neglect of any one of the various inspection points may eventually result in costly repairs and time consuming delays.

Before going to the field with the tractor, spend a few minutes acquiring the "feel" of handling it. Operate it in all the various transmission gear ratios, using the same throttle setting—about one-half of the governed speed. This will give you a general idea of the speed relationships. Make a habit of using safe driving practices.

If it has a hydrostatic transmission, you should check out the increased maneuverability and ease-of-handling that it provides.

If it has a hitch for mounted implements, attach and detach an implement a few times.

The best way to get confidence in handling your new tractor is to become familiar with it.

Do not attempt to determine how much your new tractor will pull, or how many acres it will complete, the first day in the field.

Some manufacturers recommend several hours of light load-operation before you attempt to operate at full power. The many friction surfaces in the tractor must receive their final smoothing or polishing by actually operating in place. If excessive loadings are applied before the surfaces wear-in, these surfaces may tend to gall or seize.

Light field work, such as cultivating, planting, or mowing are good jobs for light-load break-in. If your heavy work such as plowing or disking must be done at once, always use at least one gear ratio lower than you would normally use for these jobs. Be sure to check the operator's manual for specific recommendations.

International Harvester specialists recommend that engine temperature be watched closely during the break-in period of either a new tractor or a rebuilt engine. This is one of the best methods of determining whether or not the tractor is being overloaded. Adjust the load so that the temperature does not exceed the middle of the working range.

Use a manufacturer's recommended thermostat to maintain best engine operating temperature. Too low an operating temperature may cause trouble by allowing condensation of vapors that cause oil dilution. This robs the close fitting parts of badly needed lubrication.

Normal operating temperature also helps insure that the products of combustion will be carried out the exhaust pipe as gases, rather than condensing to form corrosive agents in the exhaust system.

If the tractor is delivered during cold weather, you will, of course, need to check that the cooling system has been properly protected by the use of the recommended anti-freeze solution.

Operate the engine in the normal speed range during the break-in period.

This assures full oil pressure to force lubrication to all the close fitting parts of the engine.

The recommendations for oil changes should be followed carefully. Many tractors are shipped with a special engine oil that prevents rusting and corrosion. The manufacturer may give special instructions with regard to how long this oil should be used. In some cases, this oil can be used for the first 100 hours, according to the operator's manual.

The first several oil changes are very important. It's impossible to get absolutely all the metal particles, shavings, and sand from casting cores, out of the many fine passages inside a tractor. These generally work loose soon after the tractor is put into service. So, the early, frequent oil and filter changes help get rid of these contaminants before they do any further damage.

Always drain the oil after the tractor has been in use, and is thoroughly warmed-up. Then, the particles are more likely to be in suspension and will be drained out with the oil.

These filter changes to clean up the tractor are important not only for the engine crankcase, but also for the transmission case, and the hydraulic system. be sure to follow manufacturers' recommendations on changing oil and filters, also.

When deciding upon an engine oil, pick one recommended by the manufacturer or dealer, and use it consistently. Lubricate the tractor per the prescribed lubrication guide. Tire air pressure, fan belt tension, as well as all bolts, nuts, capscrews, cotter pins, and grease fitting should be checked several times during the break-in period. Tighten any that are loose, and replace all that are missing.

A service check after about 100 hours of use is usually included in the price of the tractor. At that time, the dealer will check the items necessary for best engine performance. He also will correct any any minor difficulties that have appeared. It's helpful to make a list of these difficulties as they occur, instead of trusting to memory. Then, give the list to your dealer when he services the tractor.

Finally, remember that the increased service life, and reduced repair bills during the life of your tractor will repay you well for the extra care and attention you give your tractor during its first weeks of operation.

Photos by Stephen Jackson

Scott checks trout fry in one of his two big holding tanks. Each tank holds about 35,000 trout and is 8 feet in diameter. At right he is working to take out diseased eggs from one of his four fiberglass hatching trays. Each tray holds 10,000 eggs.

A Fishy Business

By Tom Hiscox

AT 16, Future Farmer Scott Hunt of Arcata, California, winner of the California Association FFA fish and wildlife management award, has found his lifetime career and is fast on his way to becoming one of the most successful men in his field.

A junior at Arcata High School, Scott is half owner and manager of a commercial fish hatchery that raises 100,000 rainbow trout each year. Under Scott's management the hatchery has increased annual production by over 300 percent in under three years.

It all started in September of 1974 when Scott joined FFA. Like all new members, he was faced with the decision of what to do for his project. To most of his friends it seemed obvious that he would follow in the footsteps of his father and two older brothers and become a cattleman. However, tired of being a "little brother," Scott broke family tradition and entered a totally different field of agriculture.

Scott's interest in aquatic life led him to look into the possibility of starting a fish hatchery. One of his agriculture teachers suggested that Scott contact his neighbor, Paul Holmes, who had operated a small hatchery for a time as a hobby. When Scott approached the neighbor with the idea of re-starting the operation on a commercial scale the offer was eagerly accepted. In a short time, the hatchery outgrew the old facilities and a new building and two new rearing ponds had to be constructed.

At first glance, the building that now houses the hatchery seems to be a rather large feed shed or storage building; but once inside, the visitor views a complex system of water filters, hatching trays and holding tanks containing thousands of rainbow trout. Most of the trout are sold as fingerlings for $75 to $100 per thousand, but this year Scott plans to raise some trout up to ½ pound for smaller sales to local markets. Scott does not talk much about the profits. He explained that the monetary rewards are almost insignificant in comparison to the satisfaction he receives from working in a business that he enjoys.

In raising fish it is important to eliminate any unnecessary handling of the eggs or fish, so the eggs purchased by Scott are pre-treated with antibiotics to prevent disease. The eggs are purchased from Mount Lassen Trout Farms in the spawning season (late autumn and early winter). When Scott receives the eggs they are at the "fully eyed" stage. The embryo within the egg is fully developed and ready to hatch within a few days.

The eggs are placed in fiberglass hatching trays for an incubation period of two weeks. The temperature of the water flowing through these trays is maintained as nearly as possible to 52 degrees to insure maximum survival of the young fish. After hatching, the fish feed off of the remaining yolk in the eggs. At this stage the young fish are known as "yolk sack fry." When the fry have exhausted the supply of food within the yolk sacks, they begin coming to the surface in search of food. The fry are then released into the main holding tanks for another two to three weeks or until they are 2½- to 3-inch long fingerlings. The fish are sold as fingerlings because they can withstand the shock of transportation and transplanting much easier than larger fish.

In getting started, Scott had little trouble. However, he warns that in order to get started one must have "ideal conditions." The conditions surrounding Scott's success can be considered no less than ideal. His partner provided the experience and know-how and the original hatchery had previously been constructed.

As well as having an eager partner, Scott has also had the advantage of being able to study fisheries, biology and small business management at California State University, Humboldt, and College of the Redwoods outside of his high school studies. These advantages however, have not freed Scott from the hard work of starting a business and he estimates that he spends 200 hours per month on his project.

Scott hopes that his hatchery will grow to a yearly production of one million trout, but he admits, "... that depends totally upon market conditions in the next few years."

The good taste is guaranteed

Banminth®. The wormer he'll eat right out of your hand.

All the do-it-yourself wormers in the world won't help your horse if they're not good enough to eat.

Banminth is. Horses love its pelleted alfalfa and molasses formulation. In fact, it's so appetizing, you can hand feed it.

And Banminth takes care of the worst worm problems. For example, it's 98% effective against bloodworms, a common cause of colic and, in some cases, death.

Banminth is safe. Not harsh. You can even use it with foals, weanlings and pregnant mares.

Worming is key to a horse's health. And a healthy horse plays harder, works harder, feels better and lives longer.

So feed him the wormer that tastes better. And works as good as it tastes.

Banminth Money Back Guarantee

We're so sure your horse will love the taste of Banminth, that if he doesn't, we'll refund your money. Send receipt and unused portion to: Banminth Product Manager, Pfizer Inc., 235 East 42nd Street, New York, New York 10017

pfizer

Photo by Author

TRAIL RIDE!

The high lakes trail ride is an enterprising activity of the Enterprise, Oregon, FFA Chapter. It is now an annual event.

By Gary Bye

WHAT can an FFA chapter do for recreation—one of the eleven areas in a chapter's program of activities? The answers can be as many and varied as the over 8,000 chapters which make up the national FFA membership. The favorite of the Enterprise, Oregon, Chapter is their annual "high lakes trail ride and camp-out."

The ride began as an annual event in 1963, according to Chapter Advisor Dick Boucher. Usually, at least a dozen of the chapter's 80 FFA members take part in the week-long outing.

Enterprise is located in the Wallowa Valley, famous as the cherished home of Chief Joseph, a well-known Nez Perce Indian chief. In 1877, one hundred years ago, Joseph led a small band of his people from the valley in a dramatic attempt to reach freedom in Canada, as they were doggedly pursued by soldiers of the U.S. cavalry.

Today all of Joseph's tribe is gone from the area. Yet the Indian's form of transportation, that nearly won them their freedom, is still the favorite of many of the valley's residents. Horses are seen in every spare lot, making the annual trail ride a natural for the Enterprise FFA members.

The ride allows the FFA members to enjoy the remarkable scenery that abounds near their homes. This area is called the Alps of America. Snow capped peaks of the Wallowa Mountains (a range of the Rockies) rise skyward over 10,000 feet. Rushing whitewater rivers cascade down from crystal clear mountain lakes. Spunky rainbow trout flourish in these mountain waters.

The "high lakes ride," as it is called by the Enterprise members, usually takes place in mid-August, after most of the farm members are through with the annual wheat harvest, and before the county fair and rodeo demand much of their time and energy.

The trail into the Eagle Cap Wilderness Area is nine miles long. As with all federal wilderness areas, the country is off-limits to any mechanical devices, such as chain saws or motorcycles. Special permission must be received to camp and hike in the area.

On the day of the ride each member brings his or her own horse and meets at the pack station. Prior to that day of departure, a committee has determined the necessary provisions for the week long camp-out. Food is ordered and ar-

rangement made with a local pack train operator to follow the students to their camping site with the provisions. The packer will also take in the tents and fishing gear.

Once they have left the camp, the group, accompanied by their advisors, Boucher and Pete McCabe, routinely wind their way along narrow trails, through forests and meadows and across rushing streams. At Six Mile Meadow the group stops for lunch and to rest their horses before the final steep three miles.

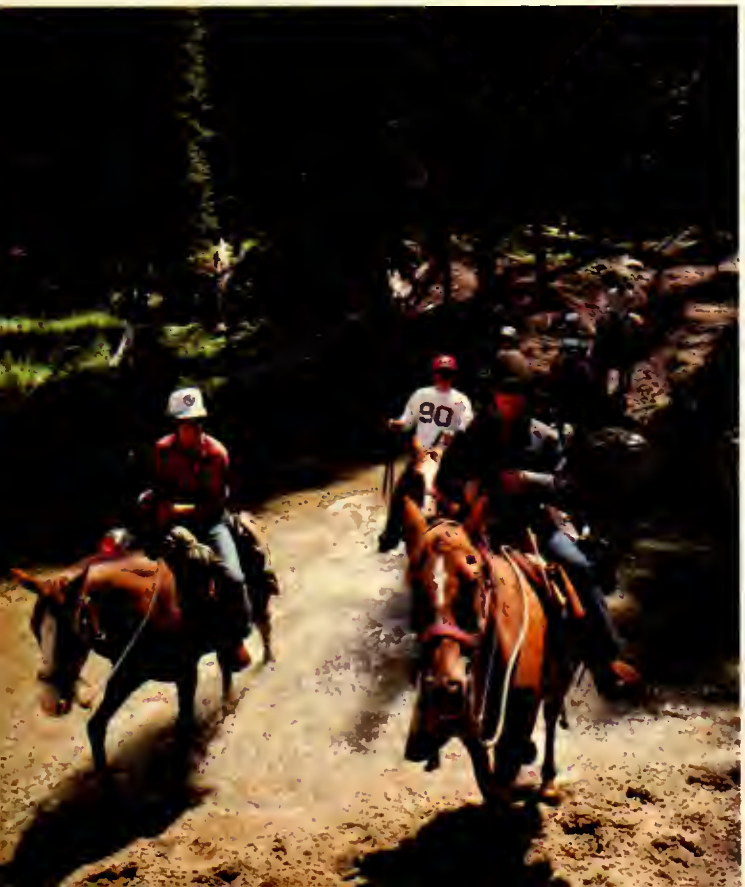
For the last few years, the chapter has camped at Horseshoe Lake. Altitude at the lake is over 7,500 feet and is fed by the winter's snowpack which lasts well into the summer. The lake serves as a good fishing and swimming site, although the water is considered a bit frigid by some of the less adventurous members of the group.

"We fish, and swim—but mostly we ride," says Audrey Sandlin, one of the last year's riders. Girls have participated in the ride now for two years.

Money for food and pack animals comes from the FFA chapter's treasury, which is built from the sale of shop projects constructed by FFA members. At the end of each school year, the chapter holds a lamb barbecue for the community. There, projects such as pickup boxes, sawhorses and boot jacks are auctioned off. Last year the chapter netted $1,200 for their treasury.

Some of the ride is through rugged terrain. This area has the Wallowa Mountains that rise to over 1,000 feet.

FFA members enjoy the scenery and the ride. Here they pass through rushing waters from clear mountain lakes.



In addition to the summer trail ride and camp-out, the chapter uses the money to sponsor a spring fishing trip and a winter Christmas tree hunt and sledding party. Informally, the chapter also holds occasional snowmobile parties.

During their school's spring vacation, advisor Boucher, a one time FFA advisor in California, takes a group of the upperclassmen on a ten-day field trip to that state. The excursion is aimed at pointing out the career opportunities in agriculture and the diversity of the industry. "California offers so many kinds of farming and agribusiness that it is an eye opener for our members who are heavily oriented to livestock and small grain production," says Boucher.

What can an FFA chapter do for recreation? Enterprise is proof that the possibilities are unlimited. Look around and see what your area may have to offer. You may even want to consider a trail ride.

Dick Stangel, another of last year's riders says the Wallowa trail ride is "a good way to get together with friends without being bothered." Chief Joseph would probably agree that the freedom of living in the mountains is an appropriate way to spend one of the last weeks of summer vacation.

SMOKEJUMPERS!

While many apply, only a few are accepted. Then it is rugged training for the tough work that lies ahead.

By Betty Steele Everett

SMOKE is spotted, rising in a thin line from a heavily wooded area of a national forest. It is quickly pinpointed and reported. But this fire is far from a road—getting to it by trail would take a couple of days, time that would allow it to spread over many more acres.

This is a problem the Aerial Fire Depot at Missoula, Montana, is prepared to handle for the 15 national forests in the Northern Region. So the local fire control officer calls Missoula. An alarm sounds and the paratroopers of the Forest Service move into action. The "Smokejumpers" as they are popularly called, will be dropped close to the fire and be fighting it in minutes, not days.

Being a smokejumper may have a romantic image, but it is hard work, requiring top physical and mental condition.

Each summer about 128 smokejumpers are trained at Missoula, most of whom have been here at least one summer before. In fact, there are usually only about 20 openings a year—and over 1,200 applications.

Most of the men are college students, with majors in everything from archeology to zoology, although forestry is the most common. Until they came to Smokejumper School, only about half had ever been in a plane, and almost none had jumped from one.

The men must be between 5′4″ and 6′3″ tall and weigh 145 to 190 pounds. They must be at least 18 and have had two seasons of fighting fires on the ground.

Jumpers have to learn to climb up the 60-65-foot poles and then come down.

These new jumpers learn the art of getting down if you happen to land in a tree.

The training is rugged, beginning with the physical examination. This includes a series of tests done at five minute intervals. Covering 1½ miles in less than 11 minutes, 25 push-ups, 10 chins and 40 sit-ups are among the tests.

Once the physical exam is passed, the work begins. For three weeks the smokejumpers learn parachuting, practicing how to leave the plane, land and roll. Seven practice jumps must be made by each man before he is sent to fight a fire.

Since most of the jumps will be into thickly wooded areas, the men must also practice what to do if they land in a tree. Part of each jumper's equipment is a let-down rope that is 100 feet of tubular nylon webbing. By hooking this through rings at the waist of his suit, a jumper can repel himself down the line, leaving his gear in the tree until the fire is out.

Since the men already know firefight-

(Continued on Page 36)

Fair For All

By J. C. Simmons
Area Supervisor

THE Southeast Louisiana District Livestock Show held at Covington, Louisiana, attracts junior exhibitors in the FFA and 4-H from 21 parishes (counties) in the state. The 1977 show recently completed was probably the best effort on the part of FFA members and their advisors since the activity was initiated several years ago.

The vocational agriculture teachers not only work with their exhibitors who participated, but they also assist in the administration and conduct of the entire show. Many duties and responsibilities are assigned to them and they carry them out very successfully. Observers indicate that this is one of the largest and best conducted livestock shows in the state.

The teachers feel that the exhibition of livestock is one of the best teaching activities accomplished during the year. The type farming in this part of Louisiana is predominantly that of diversified livestock farming. Many FFA members and vocational agriculture students remain in this type farming upon high school graduation and become very successful. They give credit for this success to their teachers and the training and experience they received as students of vocational agriculture.

Some of the awards won by FFA members as listed below indicated the extent of the district show.

The top Dairy Cattle Showman of the show was Ellery Givens. He is a member of the Mt. Hernon Chapter and his advisor is Hugh Fortenberry. Besides top showman, Ellery had the Grand Champion Holstein.

Several Covington members won honors. Mike Musselwhite had the Champion Hampshire Ewe. Craig Barker had the Champion of Other Breed Ewe and Dennis Thompson showed both the Grand Champion and Senior Champion Jersey. Mr. Emile Danna is advisor at Covington.

Tim Taylor of Lee Road Chapter had the Grand Champion of Any Other Breed Female (Beef Breeding). His advisor is Bill LaCroix.

Three other winners are pictured here with their prize winners.

Kim Willie, of Folsom Junior Chapter, is shown with her Reserve Champion Lamb. Kim was also named champion showman. With her is Advisor Clemeal Harry.

Timmy LaCroix, left, a member of Lee Road Junior High Chapter, is shown with his Champion Crossbred Market Lamb, on the left, and his Reserve Champion Market Lamb, at right. Helping Tim is Advisor LaCroix and a fellow FFA member.

David Joiner, member of Loranger Chapter showed the best fitted Ayrshire.

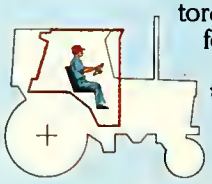
Rides so smooth you almost forget you're working with 130 hp.*

Power never came with so much comfort.

Here is what 130 pto horsepower looks like in the new International Series 86 Pro-Ag line.

This 1086 is the most popular size tractor IH® makes. And no wonder!

It's just the right size for the big jobs on most farms, and behind those 130 horses there's the famous IH high-torque lugging power for when the going gets tough. But the big news is that this new 1086 makes your work a lot easier.



You can see from the diagram that the new IH Control Center has a mid-mount design. So now you sit 1½ feet further forward—away from the bumps and jolts of the rear axle—for a far smoother ride.

And it's quiet. Even at full load and full throttle, this 1086 is almost as quiet as your car.

The gently curved, tinted windshield gives a clear view up front, and the same's true of the hitch and implement out back.

Controls are now in consoles at your fingertips. The new spring-suspended seat gives you a "floating" ride. And the improved climate control will keep you comfortable in any weather—even has directional louvers to defog the side windows.

There are up to 14 separate monitoring devices, both gauges and warning lights, to alert you to service and maintenance needs—and that even includes coolant and brake wear indicators.

For easier servicing, there are plug-in instruments, maintenance free batteries, outside-the cab electrical disconnects, even a self-cleaning air conditioning filter.

More work from your tractor and less work for you—that's what the six new models in the International Series 86 Pro-Ag line are all about. Power from 85 to 160 pto hp. Look 'em over soon at your IH Dealer and we think you'll agree:

Power never came with so much comfort.

*Manufacturer's estimate, max. obs. pto hp.

INTERNATIONAL®
SERIES 86 TRACTORS
The pro-ag line.

The new International 1086.

INTERNATIONAL®
AGRICULTURAL
EQUIPMENT

Photo by Author

By K. Elliott Nowels

LEADERS...Not Followers

A spacious, well-equipped shop area provides students with an excellent chance to develop metal-working skills.

"SERVING Stuttgart and The Grand Prairie, Soybean, Rice and Mallard Capital of the South!"

That's the statement found printed just under the title of Stuttgart's newspaper *The Daily Leader* explaining the paper's function. The same statement could be made when referring to the local vocational agriculture department at Stuttgart High School in Arkansas, where a large and diversified program is serving the needs of its students and community in education for careers in agriculture and agribusiness.

Stuttgart has a seven teacher ag department and a corresponding FFA chapter of 343 members. Students are able to choose courses of study that include crop production, animal science, horticulture, ag mechanics, drafting and metal work, among others.

Ten years ago, Stuttgart only had about 80 students in the vocational agriculture program. Clayton Castleman, who is one of those seven ag teachers as well as director of vocational education at Stuttgart, credits the terrific growth since then mainly to diversification and a good school administration.

"We try to be the leaders and not the followers," he said. "Right now we can offer any student anything he wants offered. Our administration tells us if we have 20 students that want a particular ag-related course, we can offer it. For instance, if we get 20 that want a course in artificial insemination, which is way out of line in this crop producing area, we can go to the administration and say, 'This is what it's going to cost us,' and they'll say, 'Go with it.' "

Stuttgart is located in Arkansas County about 50 miles southeast of Little Rock. In 1975, Arkansas County led the nation in rice acreage harvested and total production and was second in yield per acre of the cereal grain. Preliminary reports of 1976 show the county harvesting about 93,000 acres of rice and another 195,800 acres of soybeans. Adding the processing operations, machinery dealers and other suppliers, you have a large and varied labor force requirement.

The vo-ag program at Stuttgart is tied heavily to the employment potential in that local area. Castleman claims it has a very positive affect.

"We don't try to make it fit northwest Arkansas or southwest Arkansas or Texas or Louisiana," says Castleman, "We tie it strictly to what we have in our area. The students are interested in that, they see the possibilities of getting into ag that way."

Joe Armstrong is president of the Stuttgart FFA Chapter this year and he thinks the system is "great." "They talk to us before we take any of these classes to find out what we want to do after graduation from high school," he said, adding that he thought the program fit the needs of both college-bound students and those not wishing to go to college.

Joe is part of the co-op program, whereby a student may work a half day and go to school a half day. He works on a large farm nearby and says that the applicants for the co-op program are individually interviewed. "The emphasis is on learning. You don't get to be in it if you just want to make money to buy a truck or something, or to get out of school."

A recent building expansion has enabled Stuttgart to keep up with student demand for education in vocational agriculture. Last year, a new $1½ million vocational education building was finished and the students are spending their first year in their new home, which they share with students in other vocational programs concerned with subjects such as health and fine arts.

"We've got five ag classrooms, with the drafting lab set up in one of those," Castleman said. "We also have three shops over here and a shop, classroom and office in the old building." He explained that "the old building" is used mainly for the freshmen in the program; the location for their orientation and initial exposure to all facets of it.

Between the two buildings, two three-year-old greenhouses are situated, both usually full of plants and student activity. The students built the greenhouse themselves with funds provided by the state and district.

"They decide as a group how many plants they are going to produce—they do the whole thing. It's just like a small business to them—they have to be self-supporting," Castleman said.

Joe Armstrong has a special interest in this program and he says the program has helped him immensely.

"I learned the whole process in a greenhouse from buying the seed and planting to selling the merchandise we produced," the senior said. "I even helped build those greenhouses."

Joe says this experience and the knowledge he gained from being on the ornamental horticulture judging team could prove even more beneficial at a later date. "My brother's got some land down by Texarkana and we're thinking about going into the horticulture business together," he explained. Right now he is planning to attend the University of Arkansas in Fayetteville, majoring in agribusiness. "Through having agriculture in my high school classes, I decided that it was my interest—what I wanted to do."

The biggest challenge for Stuttgart's vocational education department and others like it across the nation probably lies outside the school on the job, where former students and sometimes current students, in the work-study case, actually apply their practical knowledge.

Kenny Tyler is the president of R-W Manufacturing and Construction Company, Inc., a metal fabricating outfit that works with grain bins, elevator heads, and other supplies necessary to the local agriculture industry. He sees a change in the younger portion of his potential labor force due to the vocational program.

"Before, we were getting students that weren't as ready to work. Today, they've been confronted with growing up earlier—getting hands-on experience. We don't seem to have to instruct them as much as we used to," he said, adding that he thought the situation would continue to improve. "With better equipment to work with, they'll be a better instructed group."

Aubrey Weathers, who is general manager of the Massey Ferguson dealership in Stuttgart, employs some of the students as mechanics on a semi-regular basis. He's not ready to draw a conclusion.

"I'll tell you the honest-to-gosh truth—I don't think the new program here has been here long enough for me to tell the effect it's really going to have, but I'll back 'em 100 percent," he said, emphasizing the latter phrase.

Stuttgart is also the home of the international headquarters for Riceland Foods, a large marketing cooperative for products of rice and soybeans. George Vickers, former personnel manager and present administrative assistant for Riceland, is also a member of Castleman's vocational advisory committee. He admits to a certain amount of prejudice when he talks of the program.

"It's been a great benefit to us as a company and to the community as a whole," he said. "There has been a good job done of engineering a program that fits the needs of our area."

Another shop is devoted to structures of a farm nature. Here a student acquires some needed skills in masonry.

Ag mechanics action. The door to the shop is over 21 feet wide, enabling it to handle the large harvest machines.

This is what a smokejumper would look like in full dress before a fire jump.

Shown at left, the tower exit lesson in which two jumpers learn the correct procedure for exiting from airplanes.

Smokejumpers

(Continued from Page 30)

ing techniques, they do not need intensive training. They spend half days for two weeks in classes, learning map reading, advanced first aid (some have emergency medical technician status), and the ecology of natural forest fires.

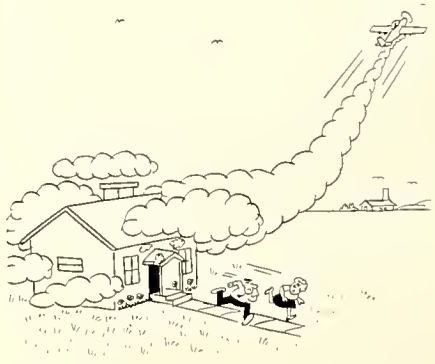
When the training is over, the names are listed, and jumpers answer alarms in a rotating order. A small fire may need only two men, at least one of whom is experienced, while larger fires may require many more.

When not fighting remote fires, the men have other assignments. Some, licensed by the Federal Aviation Administration as riggers, pack the chutes, while others help train ground Forest Service personnel in fire fighting techniques in other schools, man the information desk at the Depot Visitors' Center, or wash windows and clean the area.

When the alarm sounds, the men at the top of the list report, putting their jumpsuits on over their regular clothes. Made of fire retardant material, these suits have foam rubber padding at the joints, and a high collar to keep branches out. The helmet and mesh face mask protect the head and logger type jump boots protect the feet.

The main parachute is carried on the back, while the reserve chute is worn in front. In the personal gear bag, just below the reserve chute, are such things as personal toilet articles, a hard hat to wear on the fire line and mosquito repellent.

The men take off in a DC-3 that is always ready. The jumps are all static line, and the aim is to get the men as near the fire as possible—seldom further than a mile away. Once down, the men spread orange plastic material from their gear in an "L" on the ground to let the plane know they have landed safely. Unless the fire is a large one, no radios are carried.



"Have you been arguing politics again with that crop-dusting pilot?"

The fire pack is dropped from the plane—enough food and equipment to last two men for three days. It includes tools, dried foods, water, sleeping bags, flares to start backfires, spurs for tree climbing, a gallon can for boiling water, a first aid kit, and two backpacks to carry the equipment out in.

In large fires, planes lay down fire retardant chemicals, mixed with water. This cools the fires and is also a fertilizer for trees and plants.

Once the fire is out, the smokejumpers must return. Hiking out can take several days, although it is usually only five to seven miles. With 100 pounds on your back, though, it can seem a lot further! Once a trail is reached, gear can often be left to be picked up later by pack trains.

You may never fight a fire by dropping from the sky, but you can visit the Depot at Missoula. Although the base is manned by a small crew all year, the Visitors' Center is open only from June through September. Hours are 8 a.m. to 5 p. m., Monday through Friday, but from July 4 to Labor Day it is open seven days a week. There is no charge.

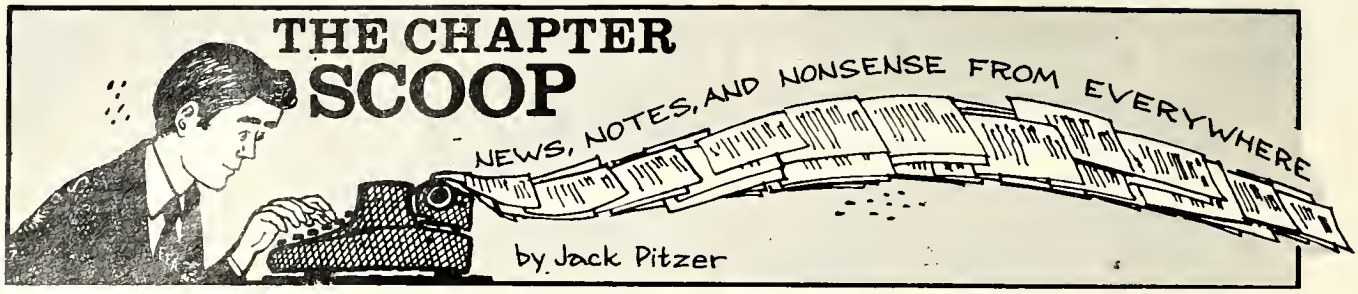
Tours are conducted regularly through the base, including the room where the chutes are packed. Displays, movies and pamphlets explain the story of these men—the "super firefighters" of the U.S. Forest Service.

You spent more than 300,000 minutes earning that high school diploma.

Now spend 20 minutes making it pay off.

In just twenty minutes, face to face, we'll spell out what the Marine Corps can offer you: careers in fields like aviation and electronics... college and vocational education... opportunities you may not have dreamed possible. And no, we aren't looking for physical giants. We want minds we can sharpen and hearts with desire. If you'd like to make your high school diploma pay off, maybe we have what you want. Twenty minutes with a Marine recruiter is all it takes to find out. Mail the card, or call 800-423-2600, toll free. In California, 800-252-0241.

The Few. The Proud. The Marines.



Dows, Iowa, Chapter has been reporting soil temperature daily to a local radio station as a rural public service.

N-N-N

Special guests at *Tarpon Springs,* Florida, Chapter banquet were presidents of Rotary, Sertoma and Lions.

N-N-N

In order to add variety to committee assignments in the program of activities, *South Hamilton,* Iowa, organized a committee draft system.

N-N-N

Owen Valley Chapter in Indiana publishes a list of major activities (this year it was 30) for the year. Copies go to local press and broadcast media. Plus to all guests at banquet.

N-N-N

Volunteers from *Lake Stevens,* Washington, Chapter did minor repairs around homes of senior citizens.

N-N-N

All eight of the Greenhands initiated into the *Ronan,* Montana, Chapter are girls. **Valarie Dunkle, Lee Ann Bilile, Beth Cullen, Carolyn Bartel, Lisa Jennison, Lori Hakes, Laurie Hall** and **Brenda Hyatt.**

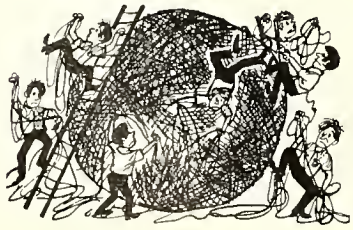
N-N-N

When *Belen,* New Mexico, Mayor Neil Alexander proclaimed National FFA WEEK, he also thanked the chapter for representing their town.

N-N-N

Reporter **Terry Wetz,** Denison, Iowa, has his own Saturday morning radio show. 6:45 a.m. on KDSN.

N-N-N



The *Lebanon,* Connecticut, Chapter is collecting used baler twine and trying not to get tied up.

N-N-N

"Our chapter unloaded lumber from a railroad car for a local sawmill." **Scott Carroll,** *Stryker,* Ohio, reporter.

N-N-N

Quitman, Mississippi, Chapter is proud of their biweekly radio spot.

N-N-N

Oshkosh North, Wisconsin, Chapter has tackled a second big fund raiser for the March of Dimes. In the fall they had a haunted house and a walk-a-thon.

"We had a disc jockey spin records at our harvest ball and gave away free records to winner of the dance contest." *Griswold,* Iowa.

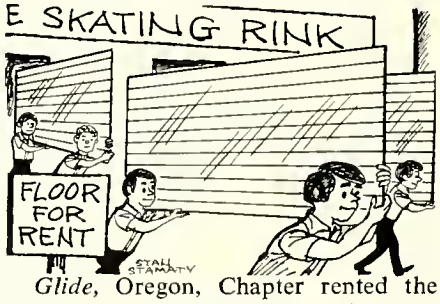
N-N-N

The FFA sent Christmas cards to the elderly in the *Jesup,* Iowa, community.

N-N-N

There were 32 dogs entered in *South Winneshiek,* Iowa, FFA coon derby.

N-N-N



Glide, Oregon, Chapter rented the floor of a skating rink for four hours to host a dance.

N-N-N

Baxter, Tennessee, hosted their district's ag skills contest and copped five out of the ten events like land measuring, rafter cutting, plumbing, electric switch and bronze welding.

N-N-N

Members of *Devil's Tower,* Wyoming, Chapter worked together on a project to build cabs for the county sheriff department's jeeps.

N-N-N

New Providence Jr. High Chapter in Tennessee had a "jean" dance and offered $5 to best outfit worn. Money will send delegate to state convention.

N-N-N

Lebanon, Connecticut, served green doughnuts and coffee to faculty on Saint Patrick's Day. Plus gave them corsages and boutonnieres.

N-N-N

Reporter of *Worth County* FFA in South Georgia sends word of FFA WEEK activities including a wildlife dinner for businessmen.

N-N-N

Free garden soil test attracted crowds to *Housatonic Valley,* Connecticut, open house.

N-N-N

Cuero, Texas, FFA raffled off a registered Brahman heifer at the livestock show as a fund raising project.

N-N-N

Algona, Iowa, sponsored "blue and gold" day during FFA WEEK. Members wore some things in those colors. Plus served blue and gold decorated cake to all students at noon.

Zillah, Washington, members agreed to have a snow party at Chinook Pass "it it ever snows."

N-N-N

Executive council of *Atlantic,* Iowa, meet at 7 a.m. followed by breakfast.

N-N-N

Most recent *Cheney,* Washington, fund raiser is selling walnuts. They brought a ton of 'em.

N-N-N

In October, the *Prairie,* Iowa, FFA assisted in staging a local disaster drill.

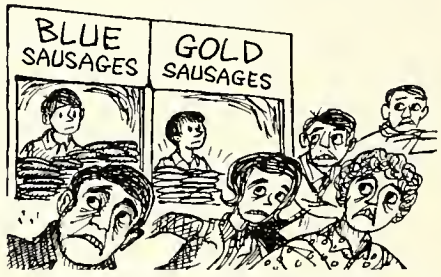
N-N-N

A picture of *North Kossuth,* Iowa, Chapter went into the time capsule to be opened in their town in 50 years.

N-N-N

This year *Webster City,* Iowa, members set up a Christmas rest stop so shoppers could warm up.

N-N-N



FFA in *Duncan,* Oklahoma, is holding its annual blue and gold sausage sale. Ugh! Never heard of either color.

N-N-N

Somersworth, New Hampshire, Chapter selected a well known department store for their FFA WEEK display.

N-N-N

James Wood FFA in Winchester, Virginia, sent an FFA cap and windbreaker to the zany weatherman on a TV station in nearby Washington, D.C. He wore it and told about FFA WEEK.

N-N-N

They also had FFA copy put on half gallon milk cartons of the local dairy.

N-N-N

Alumni affiliate of *Burns,* Wyoming, Chapter sponsored a taco and pizza supper in conjunction with FFA "slave" sale.

N-N-N

Marshfield, Wisconsin, hosted fourth annual FFA invitational basketball tourney. Had 16 teams from area chapters and 350 participants and spectators.

N-N-N

This is an opportune time for every FFA'er to send news about the chapter, or a hint about a crazy chapter project or even some bit of nonsense. Sharing successful ideas will help FFA.

THEY'RE A GOOD DEAL BETTER.

THE 1977 KZ400 SERIES. THREE OF THE BEST VALUES IN MOTORCYCLING.

Kawasaki motorcycles have always given you more for your money. And now, with the medium weight KZ400 series, you have three more ways to go.

The KZ400 Special does everything efficiently and economically. It's powered by the same four-stroke engine as the others, tuned for maximum gas mileage. A kickstarter and drum brakes keep it simple. And easily affordable.*

The KZ400 Standard is a happy medium between luxury and frugality, with a four-stroke overhead cam vertical-twin that gets any job done. Its unique crankshaft balancing system helps smooth this 36 hp powerplant for maximum comfort. Disc brake and electric starter see to safety and convenience. And chrome exhausts add that touch of flash.

The KZ400 Deluxe is the showboat. Complete with fairing, windshield, locking saddlebags and luggage rack like no other bike in its class. Custom fitted, painted and trimmed for pure pleasure. But it's not all show. An electric starter gets you off to fast starts. And a front disc brake assures quick, safe stops.

See the KZ400 series, at your Kawasaki dealer today.

Prices start at $995.*

Kawasaki

We know why you ride.

*Manufacturer's suggested list price, 1977 KZ400S, excluding freight, dealer prep, title, state and local taxes, at participating Kawasaki dealers.

Students learn the techniques of scaling using a log scale stick.

Learning to be Loggers

SIX advanced forestry students at Middleton, Connecticut, have completed a training program in production logging that enabled them to develop skills while learning under employment conditions.

Some state owned forest land is under the jurisdiction of the Department of Environmental Protection. It has developed into mature sawtimber and had not had forest management in recent years partially due to the lack of manpower trained in forest harvesting practices.

Certain DEP personnel as well as the vocational agriculture staff felt that a training program would help to provide the state and the logging industry with young, locally trained people for forestry occupations.

Under the direction of Mr. Mark Norton, forestry instructor at the Middletown Regional Vocational Agriculture Center, and with the coordination of Mr. Huber Hurlock, regional forester for the Department of Environmental Protection, the Wadsworth Falls State Park in Middletown was selected as the training site. The area had not had any inventory work performed in recent years, nor had any planned intermediate cuttings been undertaken.

The students, attending the program from different towns in the county, performed a timber stand inventory of the 275-acre park within the scope of a six-week unit in woodlot management. The regional forester invested time in explaining how inventories were to be performed on state forest and park lands and observed the students as they performed the necessary skills. Results of the data collected enabled the forester to prescribe the needs of the various sections of the park in terms of stand improvement and recreational considerations.

In addition to class time that was devoted to the project, the students also spent time after school and vacation time to complete the inventory. The students developed skills in point sampling, air photo interpretation, mapping, soil classification as well as stand and site quality determination. Measurements with tree scale sticks, abney levels and increment borers were utilized to record the needed data for the inventory sheets.

Sixteen acres of the park were then selected to be marked for a shelterwood cut of approximately a third of the sawtimber volume. Medium quality oak-hickory dominated the area. This phase of the training program provided the students with training exercises in accepted safe felling practices for efficiency and quality, as well as opened up the forest canopy and improved the seedbed for future crop tree growth.

Having had no prior training in chain saw operation other than a unit in small gas engine operation and repair, the students spent much time undergoing instruction in chain saw maintenance and repair as well as safe operation before commencing felling practices.

From May through June, the six students spent lab periods felling, limbing and top-lopping marked trees. The mixture of oak-hickory and associated hardwoods provided the students with a variety of situations to handle. Tree conditions ranged from butt-rotted trees, severely ice damaged trees, dead and rottenwood trees, heavily leaning trees to straight trees with sound wood structure.

The students participating in the program worked various days of the summer to complete the project. Logs were left "long length" to facilitate a broader appeal to the local wood producers and invitations to bid were extended. The Rossi Corporation was selected as the buyer and the students assisted in drawing up the timber sales agreement. Income derived from the 30,000 board foot volume was used to pay the state a determined percentage, to pay the students for their labor and to pay for the cost of fuel, oil, parts and extraordinary maintenance.

Altogether, over 200 sawtimber sized trees ranging from 14-inch to 28-inch diameter breast height were felled in the process. Many hours were invested in the skills development of the students. As a result, the cut-over area should re-establish itself as well as provide improved wildlife potential.

Future plans of the student participants include immediate employment in the industry upon graduation and continued education at both two and four year forestry schools. One graduate is already employed with a commercial logging company.

Here students use an increment borer in order to determine the tree's age.

Here they are using a "wedge prism" to take a sample inventory of a plot.

Old Dependable, The Spinnerbait

By Russell Tinsley

The author, right, shows how it is done.

IN MANY ways all fishing is pretty much alike, yet each individual species—and indeed different waters—requires a specialized technique and certain artificial baits.

I have been fortunate to fish over most of the United States, including Alaska and Hawaii, in Canada and Mexico and even several other foreign countries, and I have caught virtually every game fish imaginable, from black bass and the various types of trout to northern pike, grayling, walleye, dolly varden, crappie and bream (sunfish). Waters I have explored were diverse: small farm ponds, backcountry streams, rivers, lakes and huge man-made impoundments.

From this experience I have found a few lures to be universally effective. For example, the so-called spinnerbait. If I had to pick but one artificial for all my fishing needs, this unquestionably would be the choice.

There also are other factors involved. When fishing a fast stream or in a current below a dam, for instance, you might select the single-shaft design with a long and narrow willowleaf spinner. This blade has very little resistance and thus the bait isn't as likely to roll and twist your line.

Also as with any artificial, color is important, but color doesn't seem to be as crucial as size and where you fish the bait. Some spinnerbaits are decorated with rubberskirts, others with bucktails, tufts of squirrel tail, feathers, a plastic worm, or just a chunk of bright plastic. Each type has a specific purpose; the key is to learn what purpose. There is no shortcut to angling success. It is a never-ending learning process.

Here are a few things to keep in mind:

Under most conditions you will catch more fish of more variety on miniature spinnerbaits, ⅛ ounce and smaller. Use a snap-swivel only when fishing in current. A swivel adds to the overall bulk of the lure and robs it of some of its effectiveness. In calm water the swivel is not needed; tie directly to the bait or use only a small snap. If you get a twisted line because of lure roll, this is a signal that you are fishing too fast. Move the bait just fast enough to make the spinner slowly turn.

Its appeal is no mystery. Practically every game fish feeds at one time or another on small baitfish, which the spinner is designed to imitate. In short, the artificial might be best described as a fake minnow.

Yet to merely mention spinnerbait in singular is not being totally honest. Instead of a specific lure, I am talking of a whole family of artificial baits. About the only thing they have in common is that chunk of metal which revolves when being pulled through water to create fish-attracting flash and vibration.

There are, basically, three spinnerbait types: one built on a single straight shaft—Mepps, Abu, Shyster, Panther Martin, etc.; the safety-pin-shape de-

(Continued on Page 44)

Here are some of the many different styles of spinnerbaits available to buy.

Spinnerbait

(Continued from Page 43)

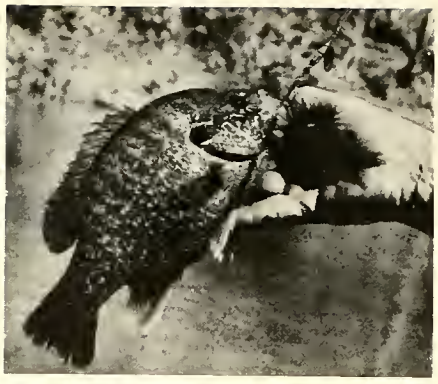
sign—H & H, Okie Bug, Lindy Spin Rig and others; and that with a solid-lead body and a tail spinner—Little George, Spinrite, etc. They come in all weights, from watchfob models for ultralight spinning to a jumbo about nine inches long made to catch muskie and other brutes of this size. They are equipped with single spinners, double spinners, little blades, big blades.

With a spinner, as with any artificial, the secret is knowing what to use, when and where. It is a matter of taking advantage of what each has to offer. This comes from study and experience.

Sometimes just the slightest subtle change might be the difference between success and failure, such as switching from a lure with a conventional Colorado oblong spinner to one with dual blades or a big spinner about the size of a quarter. Different spinners create different vibrations or "sound signals" in the water. Since we cannot communicate with fish, we only can experiment, changing baits or just spinner sizes, to try and determine what they prefer at any given time.

Cheapie spinnerbaits are false economy. They are unbalanced and are inclined to wobble and the spinners do not revolve as they should. An unsteady, erratic vibration often spooks fish rather than attracting. Some rubberskirts gob and tangle and even melt in the sunlight while quality skirts remain straight and free. Some spinnerbaits even come apart after you've caught a fish or two.

Use a heavy spinnerbait only when probing deep water. Don't select a jumbo model in order to cast it farther. Short, accurate casts are more effective than long ones. And repeat, you will catch more fish, quantity and quality, when employing a small spinnerbait.



This old husky bream or sunfish was duped by a single-shaft spinnerbait.

If a steady throw-out-and-reel-back retrieve isn't producing, try varying your retrieve and even the depth of water you are fishing. Let the lure sink deeper and reel slower. Try cranking the spinnerbait rapidly a few feet, then abruptly stopping, allowing the bait to flutter and drop like a crippled baitfish. Or fish it right on the surface. The safety-pin-type lure with a quarter-sized blade is best for this. The moment the lure touches down, raise your rod tip almost vertical and commence reeling, bringing the bait along the top, where the spinner makes a sputtering noise. Some fishermen refer to this as buzzin' for bass.

The compact lead job with a tail spinner can be fished right on bottom. This is a very effective technique for bottom-hugging species like white bass and walleyes. Let the lure drop until your line goes slack, then bring it back in slow stop-and-go jerks, picking it up, then permitting it to plummet back down.

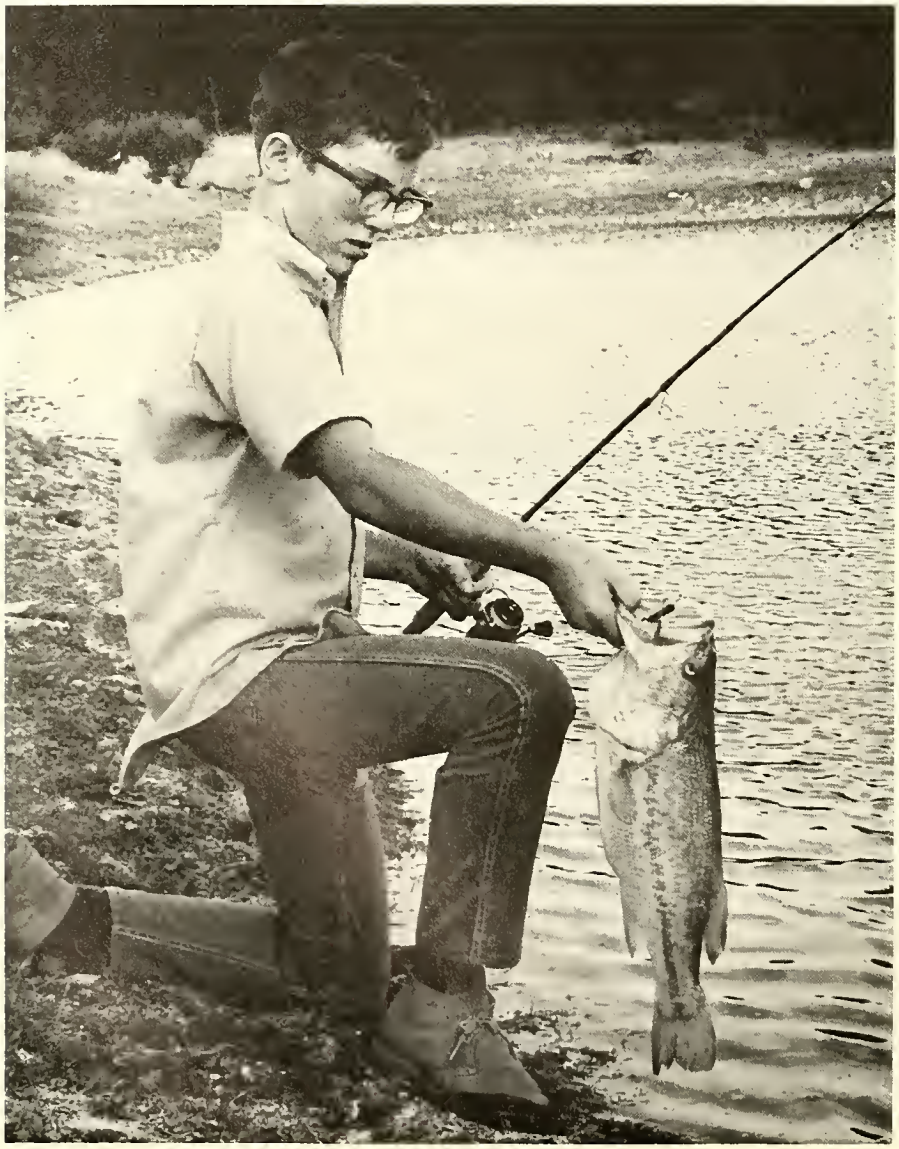
Another point to remember is that the smaller the line, the better your odds of getting strikes. With a small spinnerbait, use six-pound-test monofilament if possible, certainly nothing more than eight-pound-test. Use heavy line only if after big fish or fishing in cover where the strength is necessary.

Dual spinners or a single large one are effective when bass are attracted more by sound than sight, such as when fishing murky water. A spinnerbait often is very productive in a farm pond where the water is not real clear.

These tips should give you a hint as to what is possible with a spinnerbait. To explore the subject thoroughly would require an entire book. But the important point is that the spinnerbait is an artificial for almost all game fish in all waters in all seasons.

It is one of our oldest known lures. The spinnerbait has stood the test of time and remains more popular than ever before. For any artificial, that is the ultimate compliment.

It was a safety-pin-type spinnerbait that was the demise of this farm pond bass.



With SHELL HORSE WORMER® (DICHLORVOS) you don't have to worry about resistance...

It's effective time after time after time af ter time after time after tim

As early as 1965, some types of bloodworms were showing resistance to thiabendazole[1] (an active ingredient in Equivet-14* and Wormer Two**).

Dichlorvos has been used in horses for almost a decade. But there have still been no reports of resistance developed by bloodworms (the worms that some researchers associate with up to 85% of all "colic" in horses[2]). And SHELL HORSE WORMER controls bots, pinworms, and large roundworms as well.

So shop sensibly . . . resist worn-out claims of "newness" from other wormers. There's nothing new about Equivet-14 or Wormer Two . . . they are just new packages on products that have been around for years. If you're after time-proven parasite control, why not join the thousands of horse owners who begin with a wormer they can stay with? Start your horse on SHELL HORSE WORMER. You'll be fully satisfied with its performance or your money back. Always read and follow label directions.

*Trademark of Farnam Companies.
**Trademark of Merck & Co., Inc.

[1]Dr. J. H. Drudge and Dr. E. T. Lyons: *Proceedings* from 11th Annual Convention, American Association of Equine Practitioners, 1965.

[2]Brig. Gen. Wayne O. Kester, USAF (VC) Ret.: Modern Veterinary Practice, August, 1975.

The wormer to start with...and *stay* with.

Shell **horse wormer**

SHELL CHEMICAL COMPANY • Animal Health • 2401 Crow Canyon Road • San Ramon, CA 94583

Jason Read The Fine Print

Here is a Greenhand that took an idea and put it to work and now he is tops in his state.

By Gary Bye

Photo by Author

JASON'S designation as the state's top first year FFA member came in a large part from the small herd of registered Polled Hereford cattle he has acquired. The herd was built from a Farmers Home Administration youth loan.

"I got the idea of taking out the loan from an article I read in *The National FUTURE FARMER* magazine," says the young cattleman, who with a small amount of searching comes up with the old December-January, 1974, issue.

The article told how a member in Michigan used a low interest youth loan to start his own cattle operation. After reading the article Jason contacted the county's FmHA representative. "He came right to the high school and we sat down in a vacant office and discussed the cattle business," notes Jason.

We at The National FUTURE FARMER *get a special feeling of satisfaction when something we have printed in the magazine is picked up and put to use by a member of the FFA. So it was a particular treat to visit the home of Jason Worthington, a sixteen-year-old from Grantsville, Utah, who had just been named that state's Star Greenhand.*

"I later had to show past records of what our farm would support and proof of what registered Polled Hereford cattle were worth. I must have signed 30 to 40 papers before it was all finished."

All the paper work did some good, and the loan was okayed. In the spring of 1975 Jason received the $3,000. With the funds, he acquired seven registered Polled Hereford cows and two-thirds interest in a purebred bull.

"We contacted the president of the state Polled Hereford Association and got a list of the top herds in the state. After making further inquiries we decided to buy from the herd of the state president himself," notes Jason. "He was the easiest to deal with and wanted to help me out."

With the help of his father Jay Worthington, a part-time Hereford breeder, Jason selected two three-year-old cows, three two-year-olds, and two open yearlings. Jason's father was himself an FFA member at Grantsville and was on the state's livestock judging team that went to Kansas City in 1954. He now farms 160 acres near Grantsville and annually keeps 40 head of commercial cows.

Jason's interest in cattle developed

much the same as have many other young cattlemen. When he was a youngster, his father gave him a calf to care for. Today, in addition to his seven cows, Jason is also feeding out his first crop of calves, three bulls and one heifer.

The Worthington operation, as a practice, feeds out all their own calves on hay and grain grown on the farm. Sprinkler irrigation is used to maximize production since Grantsville is in a low rainfall area. When calves reach slaughter weight they are sold to individual customers in the Salt Lake area.

Many of the buyers are friends or business associates of Jason's mother, Shirley. Mrs. Worthington works as a bank executive in Salt Lake and strongly encouraged Jason to investigate the FmHA loan program. "We all read the article and thought it would be a good experience for a young person to have," says Mrs. Worthington. "First, it's a way to get young people started in business for themselves and second, it's good training in how to handle money and work towards a profit."

Mrs. Worthington says she was required to sign a guarantee for the loan. The money was loaned at 7 percent interest and no repayment was required for six months. Payments of just under $600 per year are necessary to meet loan requirements.

Jason says he would like to eventually lease additional acreage for expansion of his beef operation. And he and his father have discussed a scheduled replacement of the commercial cows with all registered stock.

The young Star Greenhand has proven he knows some other aspects of the livestock industry in addition to financial end. His knowledge of animal selection ranked him third among all competitors at the state FFA livestock judging contest as a freshman.

In other FFA activities Jason participates in parliamentary procedure, is active in the chapter's extensive BOAC projects, and was a participant in the Extension Service-sponsored Range Youth Camp. His goal in the FFA is to be elected to a state FFA office.

The Farmers Home Administration youth loan program is designed to make relatively low cost loans available to vocational agriculture students under 21 years of age who live on farms or in cities of less than 10,000 persons. The loans enable students to establish income producing projects in connection with their instructional programs in vocational agriculture.

If you are interested in applying for such a loan, contact your local FmHA office. Offices usually are located in county seat towns and are listed in the U.S. Government section of telephone directories.

MENS BLUE DENIM
LONG SLEEVE WORK SHIRTS

Sm – Med – Large
Extra Large

100% Washable, Heavy Weight, Cotton Denim Rugged Outdoor Quality Mother of Pearl Snaps Long Tails Worn as Light Jacket or Heavy Shirt Satisfaction Guaranteed or return for Full Refund.

ONLY $9.95 ea. + 1.25 Postage and Handling

3 For $27.95 + 3.75
6 For $49.95 + 7.50

CREDIT CARD CUSTOMERS
CALL COLLECT 1 – 817 – 336-1300

MAIL TO:
Bills Trading Post
604 Continental National Bank Bldg.
Fort Worth, Texas 76101
Please send_____Denim work shirts.
(S)_____(M)_____(L)_____(XL)_____
Enclosed is Cash, Check, Money Order for $_____(Texas Residents add 5% Sales Tax) or Bill my Master Charge ☐ Bank Americard ☐
Credit Card # _____ Exp. Date _____
Name _____
Address _____
City_____ State_____ Zip _____

Discover Leathercraft Today!

ONLY $1.95 WITH COUPON BELOW

Two Genuine Leather Kits...
Key Fob And Bag Tag!
A $6.00 Retail Value!

It's easy, fun to make your own genuine leather bag tag and key fob for only $1.95 with this complete kit! Includes pre-cut, pre-punched leather parts, 2 Craftool stamping tools, 1 oz. bottle of Hi Liter, pattern and instruction sheets, herdware, practice piece. Tools can be used for future leather projects! Mail Coupon Below Or For Faster Service

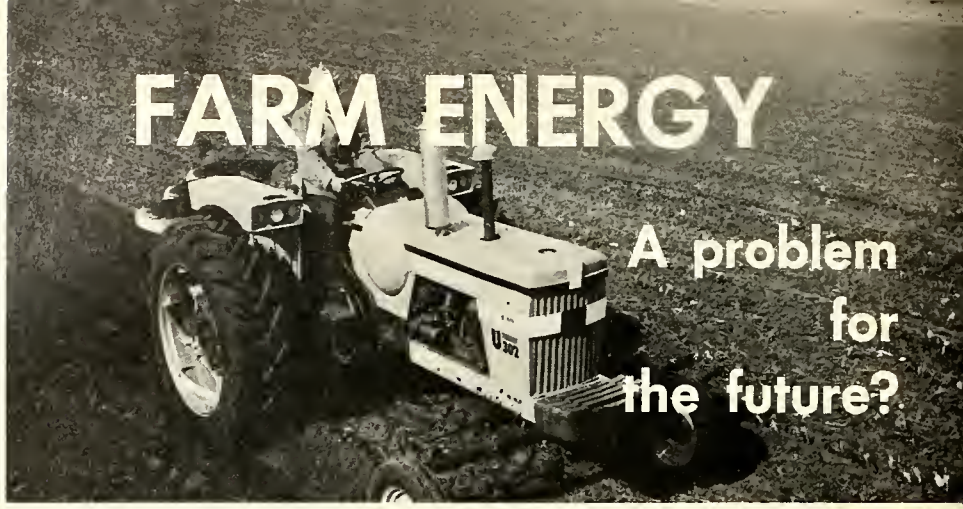
CALL TOLL FREE 1-800-433-7110 (In Texas call 1-800-792-8798)

Tandy Leather Company

Not redeemable for cash. Cannot be used in combination with other Tandy offers. Only one coupon per purchase.

Mail this coupon with a check or money order for $1.95 plus 25c postage to 2808 Shamrock, Dept. KFFA, Fort Worth, Texas 76107 (Texas residents add 10c sales tax).

Name _____
Address _____
City_____ State_____ Zip_____



PERHAPS the most important contributor to the growth of American agriculture has been the harnessing of energy to power farm equipment, reduce labor and increase productivity.

This emergence of energy has propelled the farmer into more and more importance within the economic structure. Early farmers provided food for their families with enough left to trade with neighbors and merchants. When the industrial revolution spawned cities, farmers assumed the role of businessmen and made their living feeding the growing urban population.

Young people today who are going into farming will own some of the richest crop and pasture land on earth. According to government officials, educators and economists, the harvest from American farms will become more and more important in feeding people from all nations of the world.

While earlier farmers mastered the ability to use energy, farmers must now master the ability to manage its use. The productive contribution and the cost of energy have grown side by side. In 1921 more than 28 hours of work were required to produce 100 bushels of corn. By 1959 only 20 hours were required, and today only 6 hours are required. With the increased productivity has come increased cost. In 1949 the average farm paid $380 per year for petroleum-based fuel. By 1959 that sum had reached $449 and today it is approximately $1,000.

Because both farm energy use and energy cost will most likely continue to rise, it is imperative that farmers become expert in energy management, including the selection of energy sources and the efficient application of energy.

Today's farm uses energy in a variety of ways. It is used in the farm home for heat or air conditioning, to provide hot water, to cook food and to wash and and dry dishes and clothes. Other farm buildings must be heated or cooled. Energy is needed for stationary farm equipment such as conveyors, grain dryers, milk coolers and milking machines. Mobile equipment such as irrigation pumps and stock tank heaters may be in remote locations miles from the central core of the farm. Due to changing seasons and harvest cycles, energy consumption will vary dramatically from month to month.

No farm will be able to operate on a single energy source. However, by keeping the many uses in mind, the farmer can select a balance of energy sources that are both physically adaptable and cost efficient. One key factor to consider is availability. It makes little sense to purchase expensive equipment and appliances requiring an energy source which will be unavailable in sufficient quantities in the future.

For most farms, propane deserves some consideration as one of the key fuels of any energy combination, according to the National LP-Gas Association. Propane is a liquid fuel delivered by truck to a pressurized tank which can be located in a convenient location on the farm.

Storms or human mishaps may sever gas or power lines. Propane vaporizes in the tank and can be drawn off by propane equipment regardless of weather conditions. It can be used as a power source to operate standby generators to maintain electrical equipment during blackouts or brownouts.

Energy may be needed miles away from the central farm to power irrigation pumps, livestock tank heaters and similar equipment. Small propane cylinders can provide this remote energy supply.

One of the fastest growing energy applications in agriculture has been mechanical crop-drying. Farmers no longer must wait for the sun and wind to dry crops. Instead, crops can be harvested when they are ready for harvest and placed in large dryers to reduce moisture content to levels suitable for storage or shipment to market. Portable propane dryers, with capacity to dry

What is LP-Gas?

The term LP-gas refers mainly to the hydrocarbons propane and butane. Both occur in combination with underground deposits of natural gas and oil and are extracted at the wellhead or at refineries. Total domestic production of LP-gas in 1976 was estimated at 17.5 billion gallons. LP-gas imports in 1976 totaled 2.3 billion gallons.

Below certain temperatures hydrocarbons are solids; at higher temperatures they are liquids. At still higher temperatures they boil or vaporize to become gas.

Propane exists as a gas at atmospheric pressure. Pressure produced by vaporization and expansion propels the fuel from storage to its point-of-use without pumps or gravity feed.

In the past, the U.S. has received most of its LP-gas imports from Canada and Venezuela but present trends point toward greater future importation from the Middle East, the North Sea and Indonesia.

NATIONAL LP-GAS ASSOCIATION ENERGY COST CHART

FUEL	A LOCAL PRICE		B FUEL EFFICIENCY		C BTU CONTENT		D COST PER 100,000 BTU
NATURAL GAS	$ ..... per 1,000 cu. ft.	× 1.25 =	80%	÷	1,000/cu. ft. 10	=	$ .....
LP GAS (Propane)	$ ..... per Gallon	× 1.25 =	80%	×	91,500/gal. 1.1	=	$ .....
ELECTRICITY	$ ..... per Kilowatt Hour (KWH)	× 1.00 =	100%	×	3,413/KWH 29.3	=	$ .....
OIL	$ ..... per Gallon	× 1.43 =	70%	×	#1-136,000/gal. 0.74 #2-138,500/gal. 0.72 #3-141,000/gal. 0.71	=	$ .....

from 125 up to 600 bushels per hour, can be towed into the field to dry crops immediately. Grain can be transported from the field to larger permanent dryers powered from a central propane tank. The same tank can fuel propane-powered conveyor systems to carry the grain from the dryers to large storage bins.

Because propane is a clean-burning fuel, there is no residue to clog carburetors, filters and spark plugs of engines powering tractors and trucks or other equipment such as pumps and conveyors. This sharply reduces the maintenance schedule as well as the need for repairs.

Some equipment such as pumps can be purchased with propane engines. Tractors and trucks can easily be converted by companies which specialize in this process.

Propane is stored in a sealed, pressurized tank that prevents its accidental escape and prohibits it from evaporating. Few vandals or passersby have reason to steal and use propane or have a way of carrying it to another location.

One of the most important factors in energy selection is the long-term availability of your fuel choice. Over the long term, regardless of government regulations, there will be sufficient supplies of propane to meet agricultural needs, much of it coming from other countries.

The LP-gas industry now estimates that about 7 billion gallons of propane is available from other countries today. By 1980 it will be 20 billion gallons and by 1985 there will be more than 27 billion gallons available from other countries for export to the rest of the world.

Modern technology and science is certain to present the farmer of the future with improved seeds, better feeds, and larger, more powerful farm equipment. There are even new, but as yet impractical, energy sources such as solar energy and nuclear power being explored. Regardless of the energy and equipment choices he will have available, the farmer must still rely on his own judgment and wisdom to use them efficiently and effectively.

"I warned you, one more honk, and . . .!"

Even dogs from nice families get worms.

Any pet can get roundworms. Even house pets. Large roundworms are dangerous and can be fatal if left untreated. Sergeant's® Worm-Away® Capsules make it easy to solve the problem. Simply mix Worm-Away with your dog's or cat's dinner. Sergeant's also makes Tapeworm Medicine, and Sure-Shot® Capsules and Puppy Capsules for hookworms. Just some of over 300 quality tested products from Sergeant's.

Sergeant's
the pet care people

© 1976 Miller-Morton Company, a subsidiary of A. H. Robins Co. Richmond, Virginia 23230

Good news for buckleroos

only $3.50

plus proof of purchase

Here's a sharp offer for sharp shooters. Now you can get this great new Federal waterfowl belt buckle for only $3.50 and the end label from any Federal .22 package.

This is a heavy, solid buckle done in deep, sharp relief. And its handsome antique brass finish looks great with any color belt. Shown here actual size, it fits belts up to 2" wide.

Chances are, if you're really serious about getting top accuracy from your .22s, you're already a Federal customer. If so, you probably have the end label you need. If not, pick up a box of Hi-Power®, Champion™, or Power-Flite® .22s and send for your buckle today.

Please send me_____buckle(s). Enclosed is $3.50 (check or money order) for each buckle, plus an end label from a box of Federal .22s. Make check or money order out to: Federal Cartridge Corporation. Mail to Federal Cartridge, Dept. NFF-6 Box 7300, Maple Plain, MN 55359.

Name

Address

City

State Zip

ammo you can count on

FEDERAL
CARTRIDGE
MINNEAPOLIS, MINNESOTA 55402

Wanted: Vocational Agriculture Teachers

By Richard F. Welton

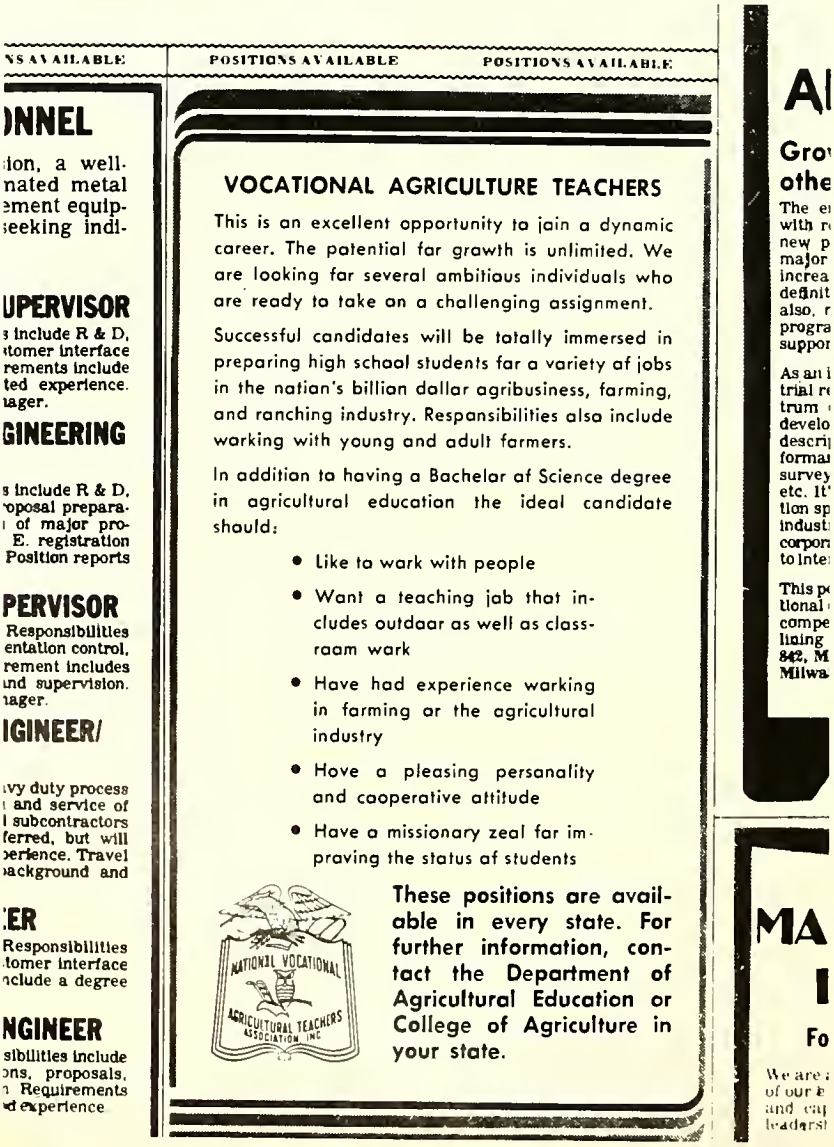
THE "positions available" ad for vocational agriculture teachers that accompanies this story has not yet appeared in a classified section. It is shown here to symbolize the shortage of agriculture teachers that exists in nearly every state. If this shortage continues, there is a good bet we may see ads similar to this one appearing in newspapers and magazines across the country.

A nationwide recruitment campaign has been underway for the last ten years to increase the number of high school agriculture teachers. These efforts have been directed by the national association of vocational agriculture teachers, supervisors and teacher trainers. This campaign has been partially successful; however, the supply of agriculture education graduates has not been able to catch up with teacher demand.

Reports projecting into the 1980's indicate there will not be enough teachers of agriculture to fill an increasing demand. Recruitment activities need to be increased and broadened. This is an opportunity for FFA members to step forward and join together in a concerted effort to help solve this continual problem. Each chapter could contribute substantially by encouraging members to consider teaching opportunities in agriculture.

Another activity could be used by chapters to promote teaching involves the recognition of former chapter members who become agriculture teachers. In most chapter rooms, the names of Future Farmers who have received the State Farmer and American Farmer degree are engraved on plaques for prominent display. In a similar manner, why not recognize former members who have become teachers of vocational agriculture?

Every FFA member reading this story represents a potential agriculture teacher. If you have an interest in this challenging and dynamic career, ask your chapter advisor for further information. If a teaching career does not appeal to you, then do the next best thing—encourage and help your chapter conduct activities promoting agricultural education. You might begin your personal campaign right now by clipping the classified ad in this story and posting it on the bulletin board in your agriculture classroom.


POSITIONS AVAILABLE
POSITIONS AVAILABLE
VOCATIONAL AGRICULTURE TEACHERS
This is an excellent opportunity to join a dynamic career. The potential for growth is unlimited. We are looking for several ambitious individuals who are ready to take an a challenging assignment.
Successful candidates will be totally immersed in preparing high school students for a variety of jobs in the nation's billion dollar agribusiness, farming, and ranching industry. Responsibilities also include working with young and adult farmers.
In addition to having a Bachelor of Science degree in agricultural education the ideal candidate should:
• Like to work with people
• Want a teaching job that includes outdoor as well as classroom work
• Have had experience working in farming or the agricultural industry
• Have a pleasing personality and cooperative attitude
• Have a missionary zeal for improving the status of students
NATIONAL VOCATIONAL AGRICULTURAL TEACHERS ASSOCIATION, INC.
These positions are available in every state. For further information, contact the Department of Agricultural Education or College of Agriculture in your state.

FFA Chapter Activities Promoting Vocational Agriculture Teaching

State FFA executive secretaries were asked recently to list the activities being used by chapters in their state to promote agricultural teaching. Their response provides some ideas for FFA chapters to use in planning activities for acquainting members with a career in agricultural education.

- Employ assistance of FFA alumni
- Present scholarships to agricultural education majors
- Encourage students to consider agricultural education through classroom instruction on career orientation
- Utilize school career activities to emphasize agricultural education
- Present program on career in agricultural education at FFA banquets
- Sponsor FFA meetings on agricultural education
- Recognize efforts of FFA advisor
- Utilize advanced agriculture students to teach freshmen and sophomores
- Promote chapter visits by agricultural education staff and state FFA officers
- Encourage junior and senior agriculture students to visit agricultural education departments
- Maintain a file and bulletin board on career opportunities
- Distribute brochures promoting agricultural education
- Show recruitment slides at various chapter functions (the most frequently mentioned slide film was "A Salute to the American Vocational Agriculture Teacher" available from the FFA Supply Service).

The author, Dr. Richard F. Welton, is associate professor in agricultural education, Southern Illinois University, Carbondale.

ISFYING, CHALLENGING, JACK-OF-ALL-TRADES, B

By K. Elliott Nowels

VARIETY, busy, satisfying, respect, challenging, jack-of-all-trades.

These are some of the words teachers of vocational agriculture seem to use when they talk of themselves and their profession. Others are rewarding, meaningful, time-consuming and sometimes —frustration. The last being used not nearly as often as the others.

John Mundt teaches and serves as FFA advisor at Meridian, Idaho. He's also a regional vice president of the National Vocational Agriculture Teachers Association (NVATA) and has taught for ten years.

"I like the fact that there is so much variety," he says. "One afternoon you might be instructing a class in welding over in the booth, and the next morning you're in the classroom discussing the selection of good cattle. You might then go from the classroom to an FFA member's home operation, then back to your office. It's variety and it does add a lot of spice."

Mundt's decision to become an ag teacher was due, at least in part, to his admiration for his own high school ag teacher. "I remember him as being a kind of 'jack-of-all-trades' person," he relates. "He knew at least a little bit about everything and was one of the smartest teachers in the school."

Jack Warnock, an advisor and teacher at Fairview High School near Camden, Arkansas, shares Mundt's feelings about his own start, in part. "I would have to give credit to my ol' ag teacher. Being a farm boy myself, I thought I could follow his footsteps a bit and be able to help farmers do their job a little better and maybe help them make more money," said the veteran of 21 years of ag teaching.

Warnock, who is known as "Mister Jack" throughout his school district, and in fact, across most of Arkansas, speaks of service often when talking about his job. "Community service is a big part of being an ag teacher. He's a 24-hour-a-day man if someone needs him."

In addition to teaching, Warnock serves as one of 11 justices of the peace in his country, a job that involves directing the business of county government. He also serves as chairman of Ouachita County's conservation district.

"Respect from students, former students and others in the community, plus the feeling that I helped somewhere along the line," are the things he thought were most gratifying about his position.

As with almost any job, it seems that a certain amount of frustration sometimes precedes satisfaction. The long hours an ag teacher keeps usually pay off in the end.

"On the whole, it's worth it," said Rick Crawford, from the Marysville, Ohio, department. "Of course there are times that you are frustrated with long hours and what seems to be no headway, but, well for example, our banquet. We worked and worked, the members and us, and it just didn't seem like we would be prepared, but then on banquet night we just sat back and they (the students) pulled it off. We got a lot of good comments and then all the time we spent was well worth it."

Crawford, who enjoys motorcycling in what spare time he has, said that some of his most gratifying moments come when he realizes students are maturing as they take on a little more responsibility through the program. "I like to see them do things on their own and be able to receive awards for it," he said.

Other big reasons for satisfaction with many teachers seems to stem from the diversified curriculum, outdoors work and application of classroom learning in FFA competition.

"I like working with the FFA," said Brenda Carr, in her first year as an instructor of ag mechanics at Coe-Brown Academy in New Hampshire, home of the Much-To-Do Chapter. "In-class work becomes so much more meaningful when you're able to go to outside competition." Carr cites this fact as being one of the reasons for her being "extremely happy" with her career choice.

"My career objectives during my first year of college put teaching at the bottom of the list," she said, indicating that the idea of simply teaching a class like science or math didn't appeal to her.

Crawford echoed those thoughts. "If I had to teach a class with a set curriculum and where I wasn't able to get to know the students very well, I wouldn't last two days. In vo-ag we have the opportunity to model the curriculum after what we feel a particular set of students need and desire. We also get a chance to know their parents and their home situations," he explained.

"Mister Jack" might have summed it up nicely when he said, "You've just got to like people. If I can help somebody any time, I'll be tickled to do it."

FFA in Action

Massachusetts State FFA officers invited presidents of several local FFA chapters to join them when they called on their Governor, Michael Dudkakis, seated here in his office for the signing of a proclamation for the National FFA WEEK celebration.

Sharing FFA Talent

Officers and members of the vocational clubs of West Montgomery, North Carolina, High School participated in a leadership workshop in which Sam Brownback, national vice president of the Central Region and Flake Brantley, North Carolina vice president, were among the guest speakers.

Approximately 50 officers and members of the FFA, DECA, FHA, FBLA, VICA and HCCNC participated in the workshop. Topics covered were: Attitudes About Yourself and Others; Group Dynamics; Leadership Roles; Goal Setting and Program Planning; Social Graces; and Publicity and Public Relations. All sessions were designed to help individuals gain knowledge and skill to become better officers and members.

After the lunch prepared by the FHA, Flake and Sam visited the agriculture classes to talk with chapter members specifically about opportunities in the FFA.

The leadership workshop, which was a cooperative effort of the vocational clubs at West Montgomery, was considered a success by participants. Officers from each club received valuable information and insight into their organizations. *(Fred Carter, Reporter)*

Flake Brantley leads the workshop on group dynamics during the conference.

Flower Flag

The Atkinson, Illinois, FFA spent many hours helping with one of the nation's largest Bicentennial projects, a six-acre Flag in Flowers on the Vern Moens' farm.

Mr. Moens got the idea during the previous year when the field was in oats and the green and gold color of the oats waving in the breeze gave the illusion of a giant flag.

Mr. Moens is a former member and has two sons Bryan and Corey who are in FFA.

The flag consisted of 200,000 red, white and blue petunias. The Betsy Ross style flag with 13 stars measured 350 feet wide and covered six acres.

Advisors Greg Patton and Ralph Moens along with FFA members helped survey, lay out, plant petunias, irrigate, weed and take care of the flag. FFA members were not the only helpers in this huge Bicentennial project, however, as hundreds in the Atkinson community also pitched in to make Vern Moens' dream possible.

The FFA members designed and constructed the wooden frames for the design of the 13 stars. They did the first day of planting entirely themselves, and helped irrigate and weed the flowers throughout the summer.

The 200,000 petunias arrived on May 9 (Mother's Day) and were unloaded by volunteers onto 32 hay racks. The problem of how to plant the flowers was solved by the purchase of a Holland onion and celery transplant machine. The FFA did the planting the first morning and the following morning Atkinson High School Superintendent Don Dolieslager and the teachers in the Atkinson High School released the entire student body to help transplant the flowers. After a few days delay due to rain Atkinson students and other volunteers helped finish the planting on May 29.

To insure a good plant survival it was necessary to obtain irrigation equipment and water the petunias almost daily at the beginning of their growth. After planting, several hours were spent weeding the six-acre flag.

The financial investment by Moens was $15,000 including the purchase of $8,000 worth of flowers. To help pay for the flag $5 souvenir deeds and aerial color photos of the flag were sold. Moens said he felt the publicity was good for the image of the farmer and that he did the project as a patriotic gesture for the Bicentennial.

Approximately 75,000 people from 35 states and 17 foreign countries viewed the flag as it received nationwide attention. *(Randy DeSutter, Illinois FFA Reporter)*

Local FFA members had quite a flower project on their hands when they set out to help plant 200,000 petunias in this six-acre flag honoring the 1976 Bicentennial. It drew 75,000 visitors.

Chili at the Launch Site

The White Pass, Washington, Chapter was busy during the National Hang Gliding Contest held at Dog Mountain near Glenoma.

The chapter members operated a concession stand directly below the hang gliders launch site. Each day new members were able to operate the stand and see the hang gliders in action. The members got a chance to talk to many pilots and learned much about hang gliding.

One of the chapter's sale techniques was a chili marathon. Many of the pilots tried to finish the marathon but only a few completed the eight-cup chili contest. The first cup was 35 cents and

5 cents off each cup until you got your free cup of chili.

The horticulture class made rhododendron leis for the daily winners of the hang gliding contest which were presented by the girls of the chapter.

The members met many pilots from all over the country and from England, France, Mexico and Germany.

Show A First

The highlights of FFA WEEK for the Glide, Oregon, FFA was the horse show sponsored by the chapter.

The 22-event horse show, which took place at the county fairgrounds, was a first for the Glide Chapter. The show took many hours of careful planning and hard work. The members of the chapter worked together in preparation for the horse show, in acquiring sponsors for the events, ordering ribbons and trophies and setting up classes.

All the hard work was worth while as the show turned out to be a great success. Over 80 entrants participated in the show. In the FFA division there were entries from as far as Lebanon, Oregon. Along with the FFA classes there were also 4-H and open classes. The show would not have been the success it was if it were not for the assistance of many of the local horse groups. The chapter is already talking of a horse show for the next year. *(Duane Coulombe, Reporter)*

Young Farmers, Too

One of the really strong supporters of Whiteland, Indiana, FFA is the local chapter of Young Farmers. The Young Farmers chapter is one of 98 chapters in their state organization. They have 22 members in the farming profession and the agriculture teacher and FFA advisor also acts as advisor for the Young Farmers.

Besides aiding FFA, they are active in the community and in the past have aided the schools, churches, nursing homes and worked on cancer drives and blood drives. They earn money for these projects by serving lunches at farm sales, parking cars at fair time and baking cakes for dinners.

The Young Farmers chapter is very active in their state organization with one member serving as state secretary.

The Whiteland Young Farmers chapter has donated time and money to the state FFA leadership camp for a cabin which is being built there. They have also hosted the state farm tour in which about 100 people visited seven farms and homes in the area.

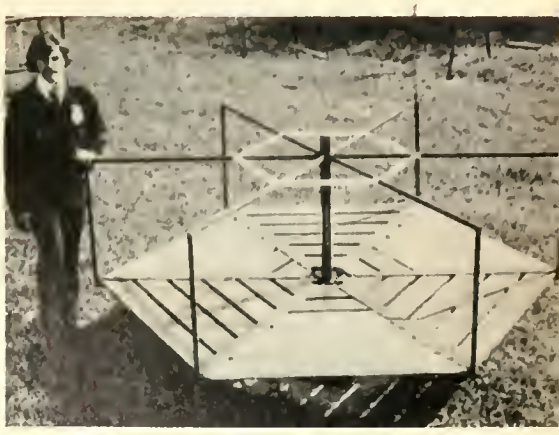
Merry-Go-Round Wins

Robert Poole, a 1976 graduate of Staunton River and a member of the Smith Mountain, Virginia, FFA Chapter, competed in the home and recreational division of the Lincoln Arc Welding contest with other agriculture, vocational-technical and industrial arts shops throughout the nation. Although regional awards were given, Robert's project was judged to be better than any of the regional projects. He is the first Virginia vo-ag student to win the first grand national award.

His entry was the Bicentennial Park Merry-Go-Round which he designed and constructed in the agricultural shop. The red, white and blue merry-go-round, constructed mainly of black iron pipe and oak boards, has been placed in the FFA Children's Park in Chamblissburg. The park is being constructed by the Smith Mountain FFA Chapter in cooperation with the Chamblissburg Ruritan Club as part of the chapter's Building Our American Communities program.

Robert received a check for $500 and also earned his high school $250 plus a plaque to be placed in the school. Dr. Robert W. Parlier, superintendent of Bedford County Schools, presented him with the $500 check at a special awards assembly. Robert himself gave the $250 check and the plaque to the chapter.

Typical criteria for selecting the winner of the contest sponsored by James F. Lincoln Arc Welding Foundation included the practicality and usefulness of the project, effective and skillful use of arc welding, ingenuity and imagination in construction of the project, safety procedures observed in construction of the project, clarity and completeness of the written report.



Robert Poole built a merry-go-round for the chapter's Bicentennial park.

A resolution commending Robert for his distinguished accomplishment on the national level was presented to the county board of supervisors.

Also he was interviewed by WDBJ television newscaster Dexter Mills at the agriculture shop. Robert explained

(Continued on Page 54)

Weaver 22 Scopes: Shooting's more fun, whether it's tin cans, targets, or small game.

Because Weaver offers more big-scope quality and features than most 22 scopes. Like an achromatic lens system with a constantly-centered reticle. Accurate adjustments. And really rugged construction. Yet a Weaver 22 Scope doesn't cost an arm and a leg.

They come complete with sturdy, lightweight mounts that install in seconds, without tools, on any rifle with factory-grooved receiver.

Let your Weaver dealer show you all three quality 22 Scopes, including a 3- to 6-power variable. Write for free 1977 catalog that shows all Weaver scopes, sights, mounts. W. R. Weaver Company, Dept. 93, El Paso, Texas 79915.

WEAVER SCOPES

The Great American Scope.

FFA in Action

(Continued from Page 53)

the nature and purpose of the project he constructed and demonstrated his welding skills before the TV camera. Film footage was also taken with his completed project at the BOAC Park at Chamblissburg.

The welding winner has served as vice president of the Smith Mountain FFA Chapter, has been a member of a district parliamentary procedure team which placed fourth in state competition and was 1975-76 Chapter Star Farmer.

Go to the Experts

The Bowling Green, Ohio, FFA Chapter hosted an officer training conference for 32 FFA chapters by using 15 area community leaders, civic officials and area farmers to conduct the various sessions.

All the speakers had previous agricultural and FFA backgrounds.

The sessions were conducted at the place of business of the resource persons, such as reporters met in the press room of the local newspaper. Tours were included.

This was the first time this type of format has been used in Ohio and 300 officers and advisors were in attendance.

Competition By Wire

The shotgun club, sponsored by the Evergreen FFA Chapter of Metamora, Ohio, issues an annual challenge to FFA shotgun clubs throughout the United States to match shooting skills.

The clubs participate in a skeet shoot in their own cities and transmit their scores over telegraph.

Evergreen's shotgun club is composed of 50 students. They are divided into ten teams under the direction of George Hershberger, chapter advisor. The club members practice shooting every other week at the Toledo Trap and Skeet Club, Berkey, Ohio.

Trophies are awarded by the Evergreen shotgun club at the end of the year to club members who successfully complete the required shooting exercises.

Bird Feeders

The Kirksville, Missouri, Chapter was involved in an emergency wildlife feeding program, February 10-18.

The program was set up in cooperation with the Missouri Department of Conservation which had declared a wildlife emergency due to the severe weather conditions.

Chapter members went around to feed and grain companies in the area and asked for donations. Over 2,000 pounds of seed and other grain was collected.

The grain was then divided into 10-pound sacks which were then made available to any individual who would come and get it and then feed it to the wildlife in their areas. The program was advertised on radio, TV and newspapers in the Kirksville area. Over 80 individuals and organizations participated in the program.

Officer Abundance

There were probably more FFA officers at Central Heights High School near Richmond, Kansas, recently than there will be any other place this year with the exception of the national convention at Kansas City next fall.

Present at the East Central District National Officers Leadership Seminar on March 1 were the six national officers, four state and six district officers and about 175 chapter, Greenhand and alumni officers from 12 schools in the district.

The national officers were all present to stress leadership and opportunities in FFA to members.

Also attending the seminar were Kansas state officers Jay Selanders, president; Jeff Zillinger, secretary; Larry Lankard, treasurer; and Steve Handke, reporter. Lynn Markle, Kansas FFA Sweetheart, also attended the event.

After a short introduction by East Central District President Sheryl Neblock, the national officers each encouraged the FFA members to participate and get the most possible out of the evening's events. The officers then led small groups to discuss what it takes to be a leader, how to get chapter members involved in activities and some of the problems chapters have. They also promoted the Building Our American Communities, safety, Food For America, proficiency awards, public relations and superior chapter programs.

National Vice President Sam Brownback, a graduate of Prairie View High School, said how great it was to come back to his home district. He served the East Central District and Kansas Association as president before being elected to represent the 12-state area as central region vice president.

In closing comments, Sam reemphasized the age-old key to success. "You have to set your goals; then you have to work toward those goals."

In other closing remarks the national officers spelled out characteristics of a leader. L is for love, E is for enthusiasm, A is for appreciation, D is for determination, E is for efforts, R is for responsibility.

The East Central District FFA'ers were then able to meet and talk with the national officers personally at a mixer.

East Central District officers who planned the evening's activities were: Sheryl Neblock, president; Pat Wiederholt, vice president; Phil Fanning, secretary; Steve Loschke, treasurer; Kevin Brown, reporter; Brenda Hundley, sentinel; and Don Benjamin, advisor. *(Becky Vining, Central Heights Chapter Reporter)*

Dairy Judgements

The cooperative efforts of the Hartford and Slinger, Wisconsin, Chapters in co-hosting a dairy judging contest at Fullpail Sales Arena near Hartford, Saturday, March 5, attracted 31 teams from around the state with a total of 119 individual judges.

The contest was won by Random Lake FFA (827) with Valders (789) second, New Holstein (780) third, Whitewater (776) fourth, and Milton (773) fifth. The top five teams received trophies.

Individual totals showed three boys from Random Lake placing one through three; LeRoy Schwab, 284, Jeff Mueller tied with Tom Birenbaum with 275. Mark Burdick of Milton, fourth with 273 and Dave Sattler of New Holstein with 272 was fifth. All five individuals received trophies.

The contest consisted of judging two classes of Holsteins, two classes of Ayrshires, one class of Guernseys and one

(Continued on Page 59)

A shotgun club sponsored by Evergreen FFA prepares for a trap and skeet exercise.

Give our country a college education.

As an Army ROTC graduate, you bring more than training and gold bars to your new job in the active Army, Army National Guard or the Army Reserve. You also bring a college education, which makes you one of our country's most valuable assets.

And since you'll be an Army officer, you'll have plenty of opportunities to put your ideas to work.

To help you meet this challenge when you get out of school, we'll help you while you're in by giving you a living allowance of up to $1,000 each school year for your last two years of college. There are also opportunities for scholarships that cover tuition, books and lab fees. That way, you can make the most of your education. And when you graduate, our country can make the most of it, too.

Army ROTC, P.O. Box 12703, Phila., PA 19134

Send me all the facts about Army ROTC.

☐ Ms. ☐ Mr. _____ Age _____

Address _____

City _____ County _____

State _____ Zip _____ Phone _____

High School Attending _____

Graduation Date _____

College Planning to Attend _____

NFF 7-06

ARMY ROTC.
LEARN WHAT IT TAKES TO LEAD.

OFFICIAL FFA CALENDARS

anniversary edition

Will YOU Be Ready for the FFA Golden Anniversary?

In 1978 FFA members in chapters everywhere, state associations and even the National Organization will begin the biggest celebration this organization has ever known. And with it, will come extra opportunities for public relations.

> This may be hard for your chapter to get concerned about since PR is usually considered one of the extras for vo-ag and FFA. But the fact remains that those who DO promote their successful FFA Chapters and the strong program of vocational agriculture education will gain more community support, school administration support, attract good new students and build more enthusiasm among members.

One public relations program, OFFICIAL FFA CALENDARS, will help you get a jump on the PR job. The '78 FFA Anniversary Calendars will promote vo-ag and FFA in your community...and a note from your chapter will bring the complete set of sample calendars, order forms and further details. The Kit is free.

There are FOUR styles of Official Calendars. The vinyl Wallet Calendar which doubles as a chapter calling card. The popular Home and Office style with 12 different color pictures. Plus the Desk style and large Poster style. These calendars are not the ones with a collection of little ads around a picture.

Here's how FFA Calendars will get favorable public awareness for FFA:

1. Your chapter can express appreciation to business or agricultural leaders in your area who have been helpful by saying Thank You on calendars.
2. Officers of your chapter can spark enthusiasm of members by involving them in distributing the calendars. Plus being sure every member and his family have Official Calendars.
3. Your FFA can improve the chapter's relationship with the banker, town council, faculty, parents or any other segment of the public by getting Official FFA Anniversary Calendars hanging in the area.

To take advantage of this PR program, send a note to the Calendar Department asking for a FREE SAMPLE KIT which includes an explanation of how the program works. The order forms are easy to follow--you or some of the members can easily start the ball rolling. No payment until after delivery. TO THE MANY CHAPTERS ALREADY USING THESE OFFICIAL FFA CALENDARS...you will receive your '78 information and reorder details automatically.

> And do it with this guarantee: That you may expect the high quality calendars to become a popular item in your area. The sooner you mail your request, the quicker you can get in an order and get a big public relations project for the FFA Anniversary taken care of for your chapter.

FFA at 50

Calendar Department, P.O. Box 15130, Alexandria, Virginia 22309, 703/360-3600

FFA in Action

(Continued from Page 54)

class of Guernseys for questions on conformation and type.

The official judge for the contest was Dick Mayer. Guernseys were provided by the Hintz farm, Ayrshires by the Dalton farm, both in the Hartford area. The Holsteins were provided by the Mayer and Melius farms in the Slinger area. The cattle were trucked to the site by area truckers.

Members of both chapters were involved in preparing the cattle, taking the judging teams from class to class, scoring the cards and tabulating final scores. The two FFA advisors responsible for assisting the cooperative effort were George Roemer of Hartford and Frank Vlasak of Slinger.

Alumni Eat

The Worthington, Minnesota, FFA Alumni Affiliate had their first annual banquet in January. The idea for the banquet was originated by the alumni committee of the high school FFA chapter. It was proposed to the board of directors of the alumni affiliate and they thought it was an excellent idea and made all the necessary arrangements. Larry Ruesch, one of the alumni charter members, volunteered to roast a whole hog. The Worthington FFA Chapter paid for the hog. Tickets were sold to cover the balance of the cost.

Dave VanderKooi, alumni vice president and an American Farmer, was in charge of the program and also served as master of ceremonies. The pops group from the high school sang during the banquet. Gary Esslink from Hills, a former state FFA officer, presented a humorous skit. One of the highlights of the evening was the alumni roast. Former FFA members Dan Perkins, Scott Rose, Marv Zylstra and Daver VanderKooi roasted Walt Larson. Mr. Larson

(Continued on Page 60)

"Mr Oates, will you please check into the payment terms in that farmer's loan?"

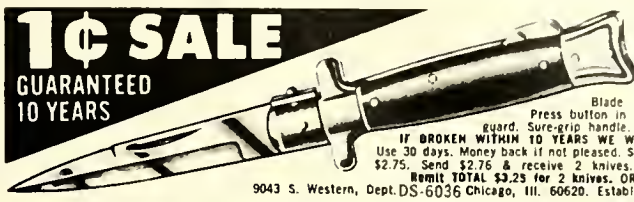
Sergeant's® Skip-Flea® Shampoo is the beautifier that kills fleas and lice as it cleans.

A good shampoo can keep your dog's coat bright and healthy looking. Sergeant's Skip-Flea Shampoo does that and more. It kills fleas and lice hidden beneath your dog's hair. It also deodorizes and comes in an unbreakable plastic bottle. Just one of over 300 quality tested products from Sergeant's.

Sergeant's
the pet care people

© 1976 Miller-Morton Company, a subsidiary of A. H. Robins Co. Richmond, Virginia 23230

1¢ SALE
GUARANTEED 10 YEARS



The knife for hunting, fishing and all around use. Mirror polished, imported stainless steel blade honed to a razor's edge. Rugged. Opens with flick of finger. Locks into position. Blade will not close when in use. Press button in handle to close. Safety finger guard. Sure-grip handle. Balanced for target throwing. **IF BROKEN WITHIN 10 YEARS WE WILL REPLACE AT NO CHARGE!** Use 30 days. Money back if not pleased. Special 1c Sale. REGULAR PRICE $2.75. Send $2.76 & receive 2 knives. Add 49c postage, handling. **Remit TOTAL $3.25 for 2 knives. ORDER NOW!** Midwest Knife Co., 9043 S. Western, Dept. DS-6036 Chicago, Ill. 60620. Established 1936. Mail Orders Only

ARE YOU MOVING?

If you move, please let us know so you will receive your magazine without interruption. Send your new address and the address label from the last issue of your magazine to Circulation Department, Box 15130, Alexandria, Virginia 22309.

RABBIT EQUIPMENT

Hutches, feeders, waterers, nest boxes, wire, hutch building supplies & tools, tattoo equipment, scales, books about raising rabbits, medications, skinning hooks, hide stretchers, live traps and dozens of other items.

For Catalog send 50¢ postage & handling.

JEWELL ENTERPRISES
Dept. F, Star Route, Detroit Lakes, Minnesota 56501

Guaranteed to last forever!

CUTS HALTER BREAKING TIME IN HALF . . .

BIG JIM HALTERS

- Scientifically designed nose applies pressure in a forward direction not just squeeze like other halters.
- Unique patented design cuts halter breaking time plus eliminates replacement of expensive show halters.
- Hand made from finest high strength steels. Durable chrome-nickel finish protects against corrosion.
- BIG JIM HALTER teaches animals to stand and lead in a growing number of rings, ranches throughout the U.S.
- Four sizes available will adjust to any animal.

BIG JIM HALTER HAS A LIFETIME GUARANTEE!

IN GLEAMING CHROME - FOR RANCH OR RING

BIG JIM HALTER COMPANY, Rt. 1, Box 65C, Boerne, TX 78006

Special FFA Introductory Offer:

SIZE	QUAN.	UNIT PRICE	FFA PRICE	TOTAL
#1– CALF 4½" x 5½"		$19.50	$15.50	
#2– 5-12 MOS. 6x7½"		24.00	19.95	
#3– COW 7x9"		26.50	22.50	
#4– BULL 8x9"		29.50	25.50	
			Postage	
			Total	

FOR PHONE ORDERS — 512/249-2480

Allow 3 weeks delivery

☐ Prepaid order: I enclose full purchase price plus $1.95 for postage and handling. (add 1.50 for each additional halter)

☐ Send C.O.D.: I'll pay postman plus postage/handling

Texas residents — add 4% sales tax.

NAME .....

ADDRESS .....

CITY ..... STATE ..... ZIP .....

FFA in Action

(Continued from Page 59)

was their agriculture instructor and FFA advisor when they were in high school. They presented him with an "ag bag" which was a gunny sack filled with mementoes from high school. He is presently agriculture instructor at the Worthington Community College.

Doug Sieve, chairman of the high school FFA alumni committee presented an "alumni of the year" plaque to Larry Ruesch. Mr. Ruesch has been an excellent supporter of the FFA, a charter member of the alumni and a citation of merit recipient for obtaining ten new members for the Worthington FFA Alumni. He is also president of the Worthington Agriculture Department Advisory Council.

Martin Aaser, high school FFA advisor and a charter member of the Worthington FFA alumni, presented the state and national charters to the Worthington FFA alumni.

Freshman Decathlon

Recently the Loudonville, Ohio, Chapter held its annual freshman decathlon.

The freshmen hold a week-long judging contest of various events such as dairy cattle, meats, farm equipment, agronomy, poultry, wool, entomology, milk, general livestock, floriculture and horticulture.

This contest is a very meaningful event as it lets the freshmen get involved in judging and helps them make a decision as to what they want to judge or what they're interested in.

The decathlon is sponsored by the chapter with a trophy to the top three individuals: John Byers receiving first place with 522 points; Jim Owens with 490 points was second; and third place Richard Martin with 474 points.

Super-Banquet

The Grove City FFA Chapter hosted a unique banquet for FFA Chapters from all of northwest Pennsylvania in observance of National FFA WEEK. Representing six counties, the 285 members and guests who attended this special event joined together for an evening of companionship and entertainment as they celebrated this year's theme "FFA—Agriculture's NEW Generation."

A near capacity crowd filled the high school cafeteria as the local chapter officers conducted the opening ceremony. Michael Beatty, Grove City president, welcomed the assembled audience which included FFA members from 16 chapters, advisors, parents, school officials and friends of the FFA.

Victor Verbeke, vice president of the Pennsylvania association, presented a challenging and inspiring address.

Jan Turner, chaplain of Grove City, offered the invocation prior to the dinner which featured creamed chicken and biscuits.

Following dinner, each of the 16 chapters in attendance had a representative present an oral description of an idea or ideas that are used successfully in their FFA activities. This proved to be very informative and many new ideas were learned. In addition to sharing of ideas verbally, several chapters had prepared written reports of their idea(s) which were distributed.

Entertainment for the evening was presented by Mr. George Bailey, a nationally known performer who amazes his audience with his astonishing memory. Mr. Bailey meets at least 100 people during the meal and later calls all 100 by name.

The 16 FFA chapters represented at the banquet include; Brockway, Clarion-Limestone, Fort LeBoeuf, General McLane, Grove City, Keystone (Rolling Hills), Knoch, Lakeview, Mercer Cross-Roads, Mohawk, Moniteau, Redbank Valley, Reynolds, Union, West Middlesex and Wilmington. *(Mary Rice, Reporter)*

Press Time

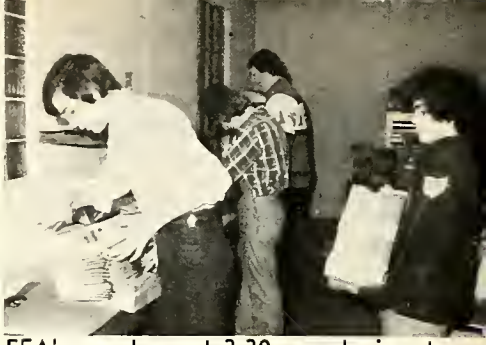
To celebrate National FFA WEEK the Big Walnut, Ohio, Chapter did something new this year. We spent many hours and some creative thinking to put together a four-page tabloid insert in the local newspaper. The insert was made to inform the people of the work of the national organization and some of the activities of the Big Walnut Chapter.

First, members were asked to write articles that would be newsworthy and to submit them to the advisors. Next, a special committee screened the articles and did some rewriting on some and wrote some extra articles. They then designed a masthead that would be attractive. The big job was deciding the order in which the articles would appear.

We then went to the news office to decide on the size of headlines for each story. After that the tabloid was then laid out to be sent to the printing company.

On the day the tabloid was to be inserted into the *Sunbury News,* ten FFA members got up at 3:30 a.m. to insert the tabloid into the newspaper. It took about two hours to do the job and by the time we were finished, we were ready to go home and go back to bed.

The tabloid did prove educational to many members as to how the newspaper business is run and it proved to be fun also. *(Jeff Miller, Reporter)*



FFA'ers got up at 3:30 a.m. to insert an FFA special in with the newspaper.

The tree pruning team from Patterson, California, won the state contest and some new equipment. From top left are Ken Bays, Dave Emmons, Craig Brooks and coach Gale Wilson, bottom left.
Photo by Farm Bureau News

Bill Vanaman may be small but he won Star Greenhand for Owasso, Oklahoma, and was presented a scrap book to use in keeping a record of his FFA career by State FFA President Dee Sokolosky.

Bolton, Alexandria Senior, Tioga and Buckeye, Louisiana Chapters elected federation officers with Eric Jarred, seated second from left, as president.

Careers

1976 Agriculture Graduates Earn High Starting Pay

A recent job placement survey of 14 midwest agriculture colleges shows that average starting salaries rose 5.6 percent from last year, and 94.8 percent of the 1976 graduates were able to find jobs. Strongest demands for graduates are in agribusiness, high school vocational agriculture teaching and farming, reports Warren K. Wessels, assistant dean of the University of Illinois College of Agriculture.

Private industry employed the largest share of the graduates with 35.6 percent. Farming and professional farm management employed 19.9 percent. Graduate study accounted for 16.8 percent. Other areas employing agriculture graduates were teaching and extension, 6.2 percent; government work, 8.6 percent; military services, 1.2 percent; and other types of employment accounted for an additional 6.5 percent. Only 5.2 percent of the graduates were not placed, adds Wessels.

Participating in the survey were the University of Illinois, Iowa State University, Kansas State University, Lincoln University, Michigan State University, the University of Minnesota, University of Missouri, University of Nebraska, North Dakota State University, Southern Illinois University and the University of Wisconsin.

In 1976, colleges of agriculture at these universities graduated 5,756 students with B.S. degrees, 1,288 with M.S. degrees and 542 with Ph.D.'s.

Average monthly starting salaries for 1976 were $881 for B.S. graduates, $1,079 for M.S. graduates and $1,404 for Ph.D. recipients. In 1975 the average starting salaries were B.S., $834; M.S., $973; and Ph.D., $1,285.

The placement officers participating in the survey estimated that the trend in employment of agriculture graduates in 1977 will be slightly better than in 1976. And they predicted that the average starting salary will continue to increase for all three degrees, B.S., M.S., and Ph.D., concludes Wessels.

Educational Benefits For Service Personnel

A new Veterans' Education Assistance (VEA) Plan became effective earlier this year for all persons enlisting in the Armed Forces on or after January 2, 1977.

Under the VEA Plan, service personnel have the option of contributing to their own education fund. They can deposit a minimum of $50 to a maximum of $75 each month with the Veteran's Administration. The limit is $2,700 per person. Upon release from active duty or upon completion of obligated service the government will provide two for one matching funds in approved educational programs. The maximum amount the government will contribute is $5,400. When you combine what the individual contributes with the government's contribution, it provides maximum benefit of $8,100. The amount of each monthly payment the veteran will receive is determined by dividing the total amount in the fund by 36. For example, an $8,100 deposit would provide the maximum of $225 monthly benefit for 36 months.

Another important provision of the Plan is the option for voluntary disenrollment with a guaranteed refund of all deposits paid by the service member. Disenrollment must be requested prior to the receipt of any monthly educational benefits.

"The VEA Program provides an excellent savings plan for fulltime college or vocational training following active military service," says P. E. Hewitt, commander, U.S. Navy. Using the Navy as an example, Commander Hewitt explains that the Navy complements this program by offering a wide variety of in-service correspondence courses at no charge, including 41 college subjects, along with a very extensive Tuition Aid Program for all active military personnel. Under this program, participants receive up to 75 percent of school tuition for off-duty education in approved college level or vocational courses.

"So you're the company president's son . . . now there's an excellent qualification."

FREE TO FFA LEADERS AND MEMBERS

Don't miss the most important issue ever of the most subscribed-to horse magazine in the world! Read what authorities of every breed say youth projects mean to America's horse industry. Reserve your copy of the August HORSEMAN now. Costs $1 on newsstands, but you'll get it FREE if you send your name and address to: HORSEMAN, Box DJ, 5314 Bingle Rd., Houston, TX. 77092. (Note to FFA leaders: send names and addresses of your class members, along with your own.)

Free how to TRAIN and BREAK

Need help with training problems? Interested in learning and earning? Prof. Beery explains his methods in this 29-page book sent FREE with information about western training and special bridle included. Serving horse lovers since 1909. Write to: Dept. 2026
Beery School of Horsemanship—Pleasant Hill, Ohio 45359

National Suffolk Sheep Association

Sheep breeders know that Suffolks are consistent profitmakers. To find out why write

NATIONAL SUFFOLK SHEEP ASSOCIATION
BOX 324-F
COLUMBIA, MISSOURI 65201

CHEVIOTS have what it takes:
- To survive lambing hazards;
- To develop desirable carcass weights on milk and grass alone;
- To import these qualities to less fortunate breeds through crossing.

American Cheviot Sheep Association
Dr. Larry E. Davis, Sec.
RR=1
Carlisle, Iowa 50047

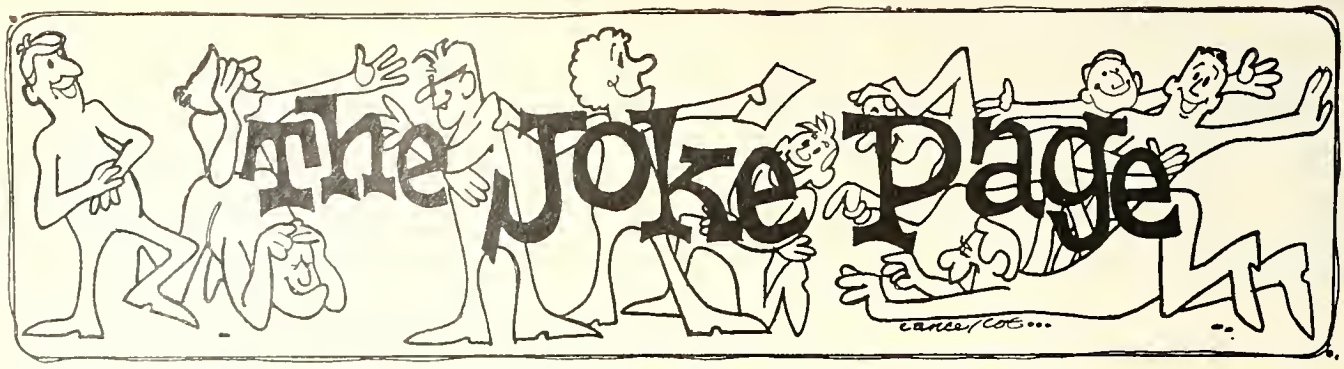
extra income SELL showing this FREE SAMPLE

ENGRAVED METAL SOCIAL SECURITY PLATES including Carrying Case, Emergency Card and 8-Yr. Calendar for only $2. You keep $1 per sale. Make $10 OR MORE per hour.

NO INVESTMENT

SEND COUPON FOR FREE ORDER-TAKING OUTFIT TODAY!

ENGRAVAPLATES, DEPT. 198
BOX 10460 • JACKSONVILLE, FLA. 32207
Please rush FREE order-taking outfit with actual sample No obligation
Name _____
Address _____
City _____
State _____ Zip _____



City Slicker: *"Why do cowboys roll the brims of their hats?"*

Cowpoke: *"So they can fit four in a pickup truck!"*

Michelle Gallagher
Kremmling, Colorado

Tommy: *"We're playing farmers."*

Mother: *"But what is Johnny supposed to be?'*

Tommy: *"He's the OSHA man who tells us what not to do?"*

Jan Adams
Noblesville, Indiana

"Can I just open up a new checking account instead of trying to straighten up the old one?"

The hillbilly sat in a car wash for three hours because he thought it was raining too hard to drive.

Debbie Stevens
Albany, Missouri

A construction worker on a new skyscraper was nonchalantly walking on the beams high above the street, though pneumatic hammers made a deafening racket and a compressor shook the entire structure. When the man descended, a bystander who had been watching him tapped his shoulder. *"I was amazed by your calmness up there. How did you happen to take a job like this?"*

"Well," replied the worker, *"I used to drive a school bus—but my nerves gave out."*

Dennis Carlson
Mandan, North Dakota

A Texas rancher bought a very expensive CB radio. The radio had three settings, high, very high and unlimited. The rancher set his radio on high and could talk to people all over the U.S. On the very high setting he could talk to anyone in the world. When the rancher set the radio on unlimited, the unit began to smoke. In despair, the man cried, "Oh, Lord!" In a moment a voice came back over the air and said, *"You got him, come on, good buddy!"*

Fedell Price
Sicily Island, Louisiana

Winken, Blinken and Nod were going across the desert. Winken asked Blinken, *"Why did you bring that canteen?"* Blinken said, *"In case I get thirsty, I can drink."* So they walked about 500 miles and then Winken asked Nod, *"Why did you bring that bread?"* Nod said, *"In case I get hungry, I can eat."* They walked about 500 miles more and then Nod asked Winken, *"Why did you bring that car door?"* Winken said, *"In case I get hot, I can roll the window down."*

Donald Bryant
Augusta, West Virginia

When a Texas school class was told the next day they would learn to draw, 18 kids showed up with pistols.

Annette Sickman
Arlington, Minnesota

Jed: *"I'm not going to feed the birds this year. Last year I spent $20 on bird seed and all I got was 'cheep, cheep.'"*

Dale McCoy
Sylva, North Carolina

Did you know there was a moron in the Indianapolis 500? He came in last. He made 75 pit stops—2 for tires, 3 for gas and 70 for directions.

Gary Weisner
Augusta, Montana

One Sunday morning a pastor got up on the pulpit and apologized for the band-aid on his face. He said, *"I was thinking about my sermon while shaving and cut my face."*

Afterward he found a note in the collection plate, *"Next time, think about your face and cut the sermon."*

Greg Phillips
Freeport, Illinois

Q: What's gray and has a trunk?

A: A mouse going on a trip.

Ronnie Decker
Caneyville, Kentucky

Charlie, the Greenhand

"Charlie is thinking of majoring in agricultural communications."

The National FUTURE FARMER *will pay $2.00 for each joke selected for publication on this page. Jokes must be submitted on post cards addressed to* The National FUTURE FARMER, *Alexandria, Virginia 22309. In case of duplication, payment will be for the first one received. Contributions cannot be acknowledged or returned.*

Tony Lama CO., INC.

Handcrafted
Quality Boots
& Fine Leather
Products

P. O. DRAWER 9518
EL PASO, TEXAS 79985

Before 1954, we made some of the most accurate 22's you could buy.

But we weren't satisfied.

When we built our first 22, quite frankly we thought we had ourselves one heck of an accurate gun.

Then 1954 came along.

That's the year we came out with Micro-Groove®. The rifling system that made an already precise rifle even more precise.

The Micro-Groove system cuts down on bullet distortion and prevents gases from escaping that can rob a bullet of its power.

And you get it in every Marlin rifle we make. Including our Model 99C 22 autoloader. But the 99C is more than just accurate.

It has a one-piece Monte Carlo stock turned from genuine American black walnut and handsomely checkered. A brass tubular magazine that holds 18 Long Rifle cartridges. Plus a solid top receiver grooved for scope mounting, side ejection, ramp front and adjustable rear sights, and a special bolt hold-open mechanism for added safety and easier cleaning.

The 99C rifle and fast-handling 99M1 and 989M2 carbines, about $69.95. Or the 49DL rifle, about $75.95. See the entire Marlin line and popular-priced Glenfield rifles, at your gun dealer's.

Also be sure to ask for our new, free catalog. Or write Marlin Firearms Co., North Haven, Connecticut 06473.

Marlin® Made now as they were then.